THE NEW YORK STATE

CONSERVATIONIST

August-September 1952

WHAT GOES ON HERE? ANSWER: ABOUT 50 CONSERVATION ACTIVITIES, INCLUDING THESE:

1 Planting anti-erosion beach grass, 2 Shellfish Inspector erecting pollution warning, 3 city and factory pollution, 4 Pollution Unit at work, 5 State Park beach, 6 waterfowl air census, 7 pulp mill at left and saw mill, 8 farm marsh with crops, 9 Forester scaling farm woodlot, 10 woodlot fenced against grazing, 11 lake resort, 12 water power dam, 13 Game Manager planting multiflora rose hedge, 14 farm pond, 15 contour farming, 16 reforestation, 17 conservation education class, 18 Forester supervising blow-down salvage, 19 insect pest spray plane with course markers, 20 Fire Tower Observer, 21 tenants quitting eroded farm, 22 Ranger halting birch peeler, 23 Conservationist reader, 24 fish stocking and Game Protector checking angler, 25 Fisheries Manager checking stream, 26 stream bank improvement, 27 State public campsite, 28 State lean-to, 29 raccoon pilfering woodduck nest box, 30 plane landing Rangers at fire, 31 porcupine ruining pulp tree, 32 beaver census, 33 Surveyor halting timber trespass—plus ducks, gulls, cows, loon, red squirrel, deer, fisher, bear, pheasants, grouse, eagle, trout and assorted other characters, some awake and doing things.

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CONSERVATIONIST

VOLUME 7 NUMBER 1

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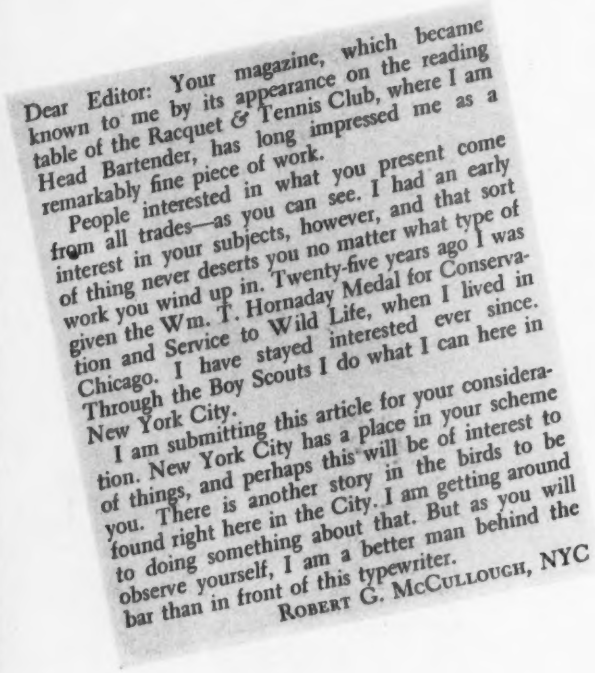
The Trees in Washington Square



Dear Editor: Your magazine, which became known to me by its appearance on the reading table of the Racquet & Tennis Club, where I am Head Bartender, has long impressed me as a remarkably fine piece of work.

People interested in what you present come from all trades—as you can see. I had an early interest in your subjects, however, and that sort of thing never deserts you no matter what type of work you wind up in. Twenty-five years ago I was given the Wm. T. Hornaday Medal for Conservation and Service to Wild Life, when I lived in Chicago. I have stayed interested ever since. Through the Boy Scouts I do what I can here in New York City.

I am submitting this article for your consideration. New York City has a place in your scheme of things, and perhaps this will be of interest to you. There is another story in the birds to be found right here in the City. I am getting around to doing something about that. But as you will observe yourself, I am a better man behind the bar than in front of this typewriter.

ROBERT G. McCULLOUGH, NYC

BY ROBERT G. McCULLOUGH

Boy Scouts are required to identify ten trees and know their uses. The more advanced ranks must extend this knowledge, and so here in the city we began a search of our own neighborhood for trees and shrubs. A rather unusual story developed. It is also gratifying to note that the awakened interest of the boys and neighbors will serve conservation purposes.

Tree-hunting expeditions through Washington Square Park, church yards and Greenwich Village streets provided a surprising list, but many of our finds defied the Public Library's books and our own knowledge of native trees. So at this point we enlisted the services of Mr. G. L. Wittrock, Assistant Curator of Education, at the New York Botanical Garden—and then the project became exciting.

Mrs. Steinert of the Washington Square Association had already helped with calls to the Forestry and Park departments. In her office files she found yellowed records of early Village days useful to us in many ways, particularly in describing the course of Minetta Brook. When we were leaving her office, she said: "If you are wondering about a crabapple tree you'll probably find, it was planted in the Park for a lady who called me when it had outgrown its tub."

By the time Mr. Wittrock arrived in Greenwich Village we were ready for him with a map we had prepared to number and name all trees studied and verify our findings. The trip started at MacDougal Street and Waverly Place. The huge English Elm as you enter the Park at this point became the first correction, as we thought it to be an American Elm. He remarked at its size. We had found it to be fourteen feet, ten inches in circumference. We could also tell him that it was known as the "Hanging Tree," having served as a gallows in its day. We explained that all the trees he saw in that vicinity were being secretly nourished by Minetta Brook, now flowing underground. The Holley Hotel nearby has a fountain in the lobby that taps the stream, but we made no effort to direct him that way as we were to anxious to utilize all his time to our purposes. Having heard that this tree was over two hundred years old, we asked him about that and he said it could easily be so. The next tree was a Sycamore or Plane Tree and here it seemed we had three varieties: American, English and the Hybrid. Close examination of the fruit and leaves is necessary to distinguish them. Because lumbermen, guides, farmers and botanists have all had a part in naming trees, the same tree will often have many names. Mr. Wittrock furnished Latin names as well as the most common name.

In that immediate area we found that we were right about the Norway Maple. Mr. Wittrock showed us how to be positive by taking the stem of the leaf and squeezing it for a milky fluid that distinguishes it from the other maples. As Scouts are required to know the useful features of the trees, we were full of questions and it soon became apparent that many of the trees were valuable in their own right.

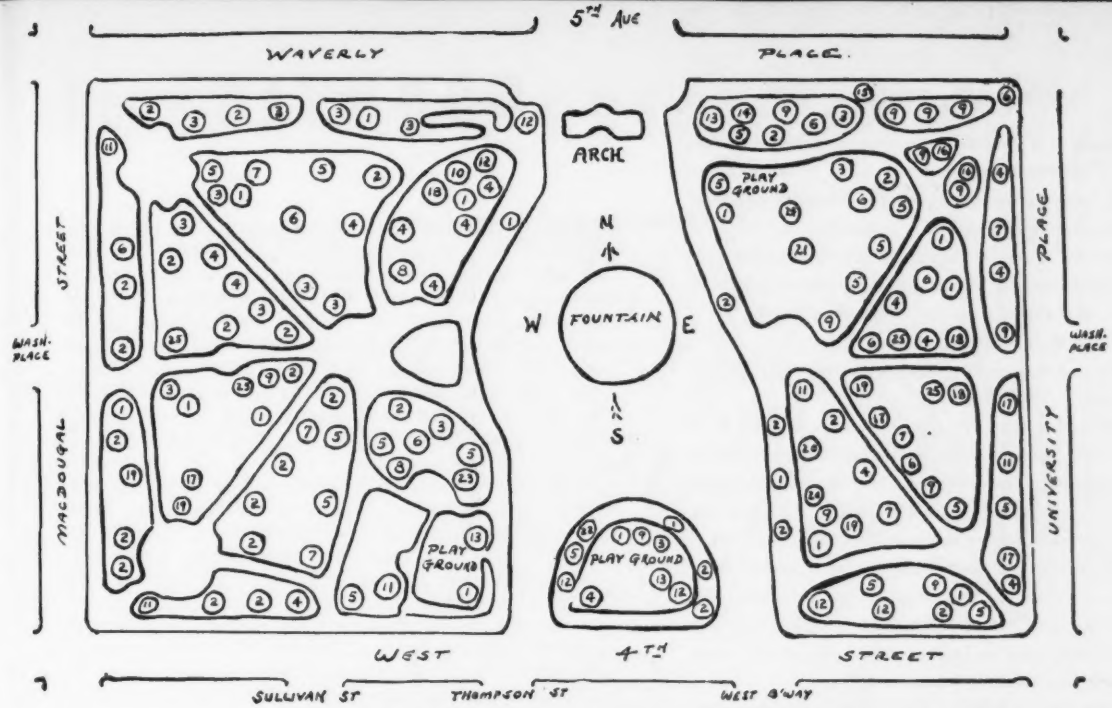
Moving along toward the Washington Square Arch at the end of Fifth Avenue we found the very showy Catalpa, and next the Gingko. This latter tree is a story in itself, being a survivor of prehistoric times. Fossils found in Europe and Asia show it unchanged in a million years. The Chinese preserved it, regarding it as sacred and planting it near their temples. It is to be found all over the Village, and people have doubtless wondered at its odd branches and fan-shaped leaves. Nearby was a shapely Pin Oak, most abundant of the oaks to be found in our streets.

Before we reached the Arch we encountered the White Ash, American Elm, American Linden, Swamp White Oak, Black Locust, and White Ash. Now things started to get exciting, as the next tree was declared a Golden Rain Tree or *Koelreuteria*, native of China and Japan. We now had 12 trees, not counting the different types of Sycamore, and we crossed into the next section of the Park wondering what was in store for us. Plenty, it soon proved.

First there was the Red Oak. A beautiful native tree that was taken to Europe as early as 1740. At Baden, Germany there is a 450-acre tract of them, many very old.

Behind the Oak was a huge Horse Chestnut. A little distance more and we had a Silver or Soft Maple. Now we were in a promising grove at the University Place end of the Park, surrounded by Osage Orange and Honey Locust. Both beautiful and valuable trees that we talked about for a while, and then strolled to the grove in the center of that end of the Park. Of all things—the several trees where the students leaving the Main Building of New York University can first seat themselves (to put their thoughts together) proved to be the Chinese Scholar Tree, or *Sophora japonica*. Mr. Wittrock had to check it along with a few others and has since confirmed it. His pockets were already stuffed with generous samples of the trees he wished to be more certain of himself.

The Flowering Japanese Cherries were near the playground, not all surviving but many showing good promise. We now observed another type of Linden from Europe, the



1. AMERICAN ELM, Ulmus Americana; 2. SYCAMORE, Platanus Occidentalis; 3. NORWAY MAPLE, Acer Platanoides; 4. CATALPA, Bignonoides; 5. GINGKO, Gingoaceae; 6. PIN OAK, Quercus Palustris; 7. WHITE ASH, Fraxinus Americana; 8. AMERICAN LINDEN, Tila Americana; 9. BLACK LOCUST, Robinia Pseudoacacia; 10. SWAMP WHITE OAK, Quercus Bicolor; 11. ENGLISH ELM, Ulmus Procera; 12. GOLDEN RAIN TREE, Koelreuteria Paniculata; 13. RED OAK, Quercus Borealis; 14. HORSE CHESTNUT, Aesculus Hippocastanca; 15. SILVER MAPLE, Acer Saccharinum; 16. OSAGE ORANGE, Maclura Pomifura; 17. HONEY LOCUST, Gleditsia Triacanthos; 18. CHINESE SCHOLAR TREE, Sophora Japonica; 19. SMALL LEAFED LINDEN, Tilia Cordata; 20. SWAMP POPLAR, Populus Hetrophylla; 21. JAPANESE CHERRY, Prunus; 22. FLOWERING ASH, Fraxinus Ornus; 23. TREE OF HEAVEN, Ailanthus Altissima; 24. AMERICAN CRABAPPLE, Malus Coronaria; 25. ENGLISH-HYBRID SYCAMORE.

small Leafed Linden. Along the drive there was Swamp Poplar. A small Ash Tree puzzled Mr. Wittrock, so he took a sample and later stated that his associates had labeled it the Flowering Ash, a European tree.

Crossing into the last section of the Park we were greeted by the inevitable *Ailanthus altissima*, or Tree of Heaven. It flourishes all over the Village in all kinds of impossible places, and originally came from China. We began finding more of the trees already listed, and some were finer examples than those first studied.

As we finished the tour of the Park we had 25 different trees and were determined to make the most of our expert's time. We led him toward St. Luke's church yard on Hudson Street.

On the way he noted the trees growing on rooftops, and the windows and ledges full of plants, flowers and shrubs. A fruit store had an Avocado growing to considerable height. Another store had a Sassafrass struggling away in a tub. Everywhere there was evidence that the Greenwich Village people like to have growing things around. We told him about the *Ailanthus* growing through the Little Venice Restaurant on 13th Street. The owner built around it when he made an addition to his establishment. A peach tree on the same street made news when, after being raised from a peach stone, it began bearing fruit after it was accidentally upset from its tub and replaced.

Going through Leroy Street the Gingkos were so flourishing we attributed it to the fact that Minetta Brook was still exerting its influence underground. Vines climbed completely over houses. At this point Mr. Wittrock remarked: "You really have your own Botanical Garden right here in Greenwich Village."

At St. Luke's he was fascinated by the old church and exclaimed over the 11 different trees to be found around it. To our list we added Cherry, Mulberry, Magnolia, Willow, and the famous Glastonbury Thorn, found in Jerusalem. Tradition has it that the Crown of Thorns was made from this trees. There was also the Small Leafed Linden, Catalpa, Poplar, Silver Maple, *Ailanthus* and Flowering Crabapple. Many other shrubs and plants were identified for us in the yards of the very old houses behind the church.

Upon leaving the Village Mr. Wittrock said to call upon him for any further assistance. We asked for suggestions on labelling the trees and he told of methods used at the New York Botanical Garden. Metal or lead identification tags seemed to disappear even there, evidently for scrap. Suitable wooden ones could be used.

WE now have our map with its identifications, and if we can get the trees labelled with the permission of the authorities our tree project will have a happy conclusion. Anyone walking in Washington Square Park would have a new interest in it. A complete circuit would be necessary to find the 25 trees, and probably only one of each would be labeled. In many cases there is only one to be found.

With the trees identified in this manner it would doubtless give a lot of children increased respect for them and prevent some of the vandalism that has become such a problem in New York City. "The Villager," our local paper, is aiding in this project and has aided greatly in making the entire neighborhood conscious of Nature at work in the Big City.

We made this survey last October. The trees soon began losing their leaves and it was not considered the time to publicize and push the project. Now, however, the Village is out in all its greenery and bloom, and we are getting an early start.

Why We Fight

Looking back over the past year or so, it occurs to us that the Conservation Department has been involved in an unusually large number of squabbles. A quick check of our ears and bruises reminds us of a free-swinging fight over the Forest Preserve, a nice exchange of lefts and rights over deer seasons, brisk trading of punches over almost anything from ducks to the Forest Practice Act. And lately we've gotten into a fairly dirty fight over striped bass.

So you've got a Conservation Department that gets mixed up in a lot fights. Why?

By way of answering that question, let's have a quick look at just one of these wrangles, the latest, the one over striped bass. In one corner are those who feel that the striper ought to be reserved for anglers; he's a wonderful game fish, deserves being accorded protection from commercial netting, and it's a shame that politicians and mercenary interests interfere to prevent such recognition. In the other corner are those who admit all the game qualities of the striped bass, but who say that to restrict him to anglers (except on a local basis) would be wasteful—and Conservation means wise use.

In which corner do you find the Conservation Department? Well, the happier we can make the sportsmen, the happier are we, and so you might expect to find us siding with those who want the striped bass restricted to anglers. That would be the easiest, certainly the most popular thing to do. But instead, we side with the very few men who have devoted their professional lives to a study of marine fisheries and who, without any reservations that we know of, tell us that there are plenty of stripers to support both commercial netting and sports fishing except in specific, limited areas. In such areas there should be special regulations favoring the angler.

The reason why we refer to the fight over striped bass is that it has one thing in common with most of the other fights that we've been mixed up in lately. You find the Conservation Department on the side of the biologists. They are the foresters, the pathologists, the entomologists (in fact all the men especially trained in the sciences of living organisms) who make up the technical core of good conservation departments.

In the broad sense, what happens to the striped bass is comparatively a minor issue. But whether conservation departments should follow public opinion on the one hand, or what are often the "minority reports" of biologists on the other hand—that is a major issue, and conservation departments all over the country are required to face it all the time.

This is both a moral and practical issue. Morally, this is the way we see it: Should we stick with our men, the men who ought to know the answers if anybody does, or should we sell them short when the opposition gets tough?

Practically, this is it: We recognize that while biology is not an end in itself, it most *definitely* is a vital means to an end in establishing sound, progressive conservation. In fact, if we don't stick to the findings of our biologists, then what have we got to work with? And where will conservation be 10 years from now? And why bother to have conservation departments?

Editor

COUNTIES of

WESTCHESTER and Putnam counties are unique in many ways, containing many features and situations not common to the other counties. Much of this is due to their close proximity to the Metropolitan area, their rural-urban mixture of life and livelihood and the exceptional water resources which make up a large part of New York City's water supply. Such names as Kensico, Croton, Cross River Reservoir are familiar to sportsmen and laymen alike. For details on these waters, write to our Albany office for a free copy of "Liquid Assets," a report of a previous article in this magazine.

This water supply system of 13,512 acres plus a few streams, such as Saw Mill River and Bronx River, form a fine outlet for fishermen's energies. These waters were stocked in 1951 by a grand total of more than half a million brook, brown, rainbow and lake trout and walleyes (pikeperch). Of the trout, Westchester received 5,800 native brooks, 31,500 browns, 4,670 rainbows and 11,385 lake trout. Putnam got 12,300 brooks, 30,118 browns, 4,788 rainbows, 12,060 lake trout and 500,000 pikeperch fry. On the map only waters stocked with more than 300 fish are named. For the complete stocking lists write to the Albany office.

All these waters (except a few restricted areas) are open to public fishing, but those in the water-supply system are under special regulations set up by the City of New York's Department of Water Supply, Gas and Electricity, Municipal Building, New York 7, N. Y. To fish in these waters, one must have a regular State fishing license, and also a permit from the above Department. Both fishing and boating permits are issued without charge to U. S. citizens only and are not transferable. Two full-face photographs 1½" x 1½" must be submitted. To obtain a fishing permit, the applicant must appear in person at one of the Water Department's offices. In these counties such offices are at Katonah on Route 35 just north of the city; at the Kensico Gate House in Valhalla; and at Shaft 10 on Route 6 at Carmel.

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Trolling and casting for stripers in Long Island Sound offers excellent sport. In addition there are the attractions of the Sound itself—including boating and fishing for many species other than the striper.

There are a number of special laws governing both hunting and fishing in these two counties, so be sure to study them. Hunting is especially limited, particularly in Westchester where no guns may be used in the lower third of the county and only shotguns and small-bore rifles in the rest of the county for small game. Deer may be taken only by the long bow (no cross bows or guns). This year both

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The wildlife situation in these counties is greatly influenced by the gradual evolution from the original farmlands to urban ownership, whereby commuters use the homes but allow the lands to revert to natural cover. As a result, farm game (such as rabbits and pheasants) is decreasing, while forest game (such as deer, raccoons and foxes) is increasing—with resultant damage to gardens and shrubs and no means of adequate control.

Both counties have many beautiful parkways. Those in Westchester are County Parkways, the rest are State Parkways under the Conservation Department's Division of Parks. The Taconic Parkway from Valhalla north is the only State Parkway in Westchester. The new Thruway, as planned, will enter Westchester south of Tarrytown and parallel the Saw Mill River Parkway into Yonkers. The Bronx River Parkway was the first in the world designed and constructed solely for pleasure vehicle travel.

All the parks in Westchester are County Parks, while the State has the Clarence Fahnestock Memorial Park in Putnam County. Stillwater Pond in this Park is of special interest to anglers because of the experimental program of reclaiming the waters for native brook trout fishing. Reports of this experiment have been published yearly in this magazine. This popular park of 3,400 acres is noted for hiking, riding, skiing and picnics as well as fishing.

Posting of the lands in these counties is not so serious as rumored. Reputable sportsmen, by courteous request, may obtain hunting and fishing permission from a great many of the owners, but it must be stated that sportsman-landowner relations in these counties should and could be much improved by organized groups.

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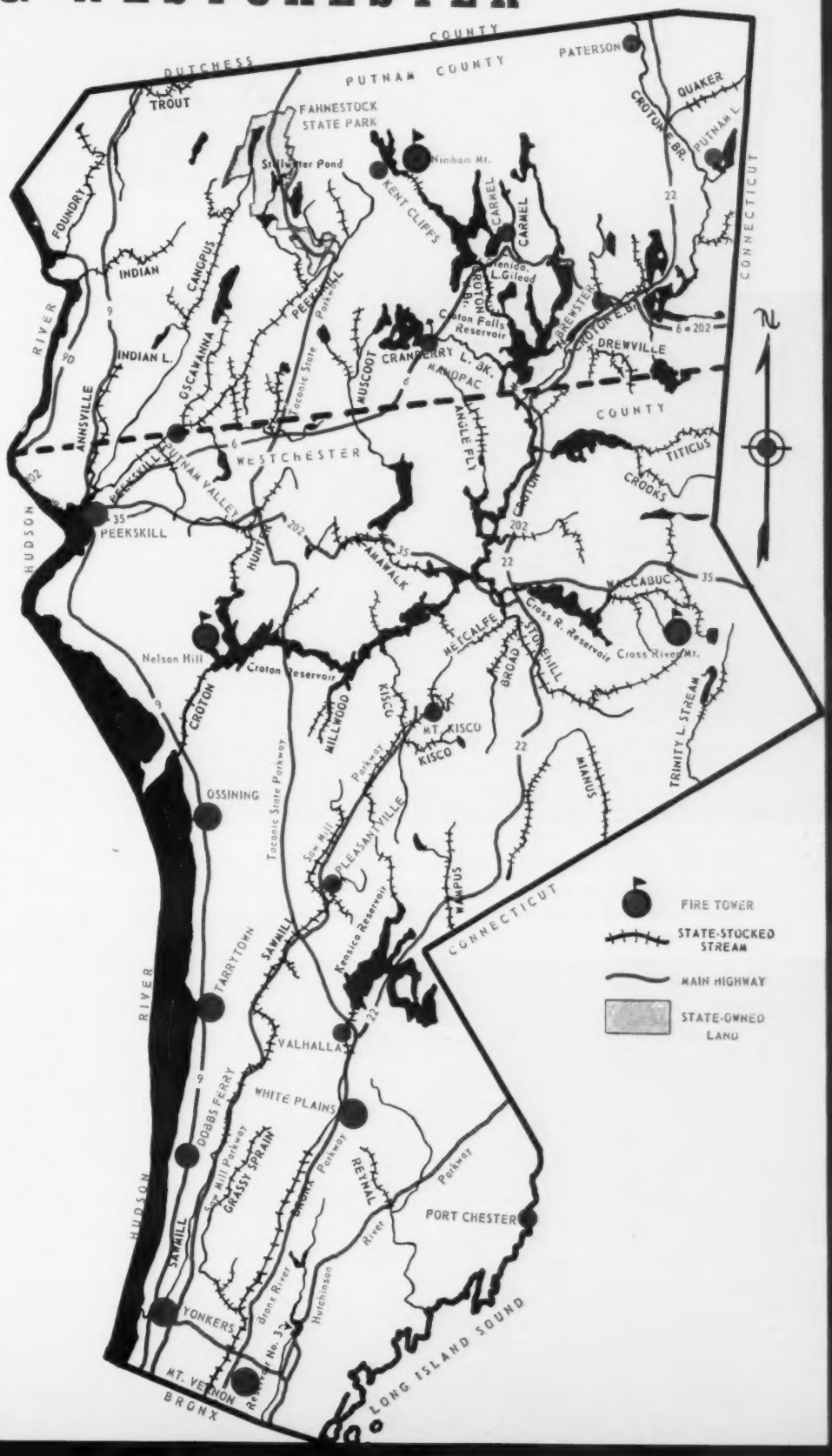

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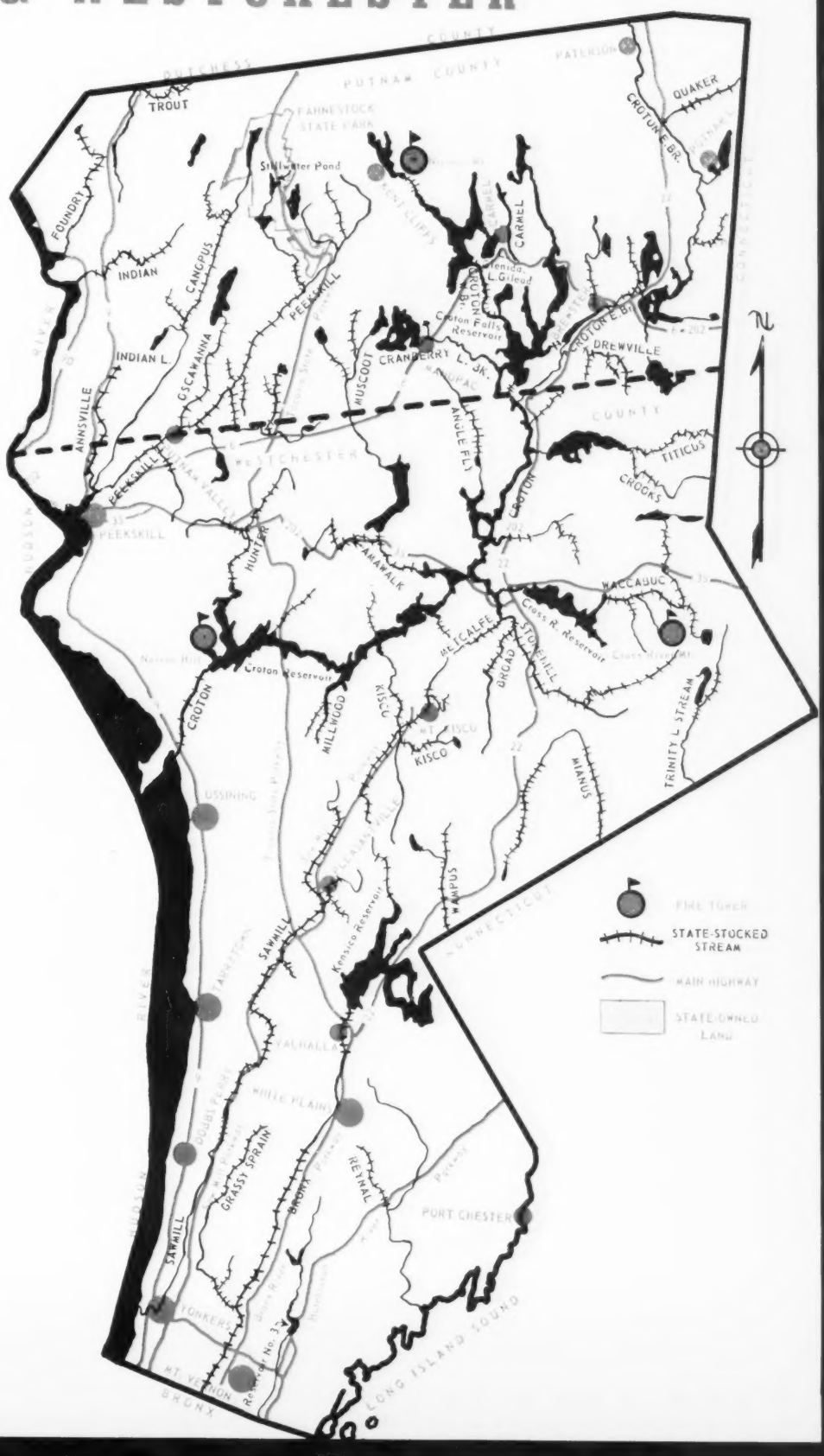


LOGGING UNDER THE WEBB COVENANT

"Log haul roads that may be constructed on a side hill must follow as nearly as possible the contour, so as to reduce the danger of erosion." Notice reproduction of hardwoods on skid road in photograph at bottom.

DURING the closing decades of the 19th Century, William Seward Webb of Nehasane Park was one of the great landowners of the western Adirondacks. He was deeply interested in preserving the beauty and the recreational values of this part of the Great North Woods, but he also understood the economic necessity for harvesting timber crops from the then limitless forest.

In 1896, Mr. Webb began incorporating into the deed to every property that he sold the now famous "Webb Covenant." This provided that the lands so sold should not "be used or sold for commercial, agricultural, manufacturing or other purposes," but were to be kept "exclusively for permanent forestry, hotel, camp and cottage purposes." The Covenant was and is binding upon all subsequent owners. Just what Mr. Webb meant by "permanent forestry" was not entirely clear, and has lead to some little controversy. But the Conservation Department, which is responsible for the enforcement of the Covenant, interprets it to mean that timber harvesting is to be done with due regard for the maintenance of scenic and recreational values. When the Forest Practice Standards for Districts 8 and 9 were adopted, these were deemed to apply to all lands covered by the Webb Covenant.

Logging contracts within the area covered by the Covenant must provide for the reservation of strips of uncut timber along lake shores, streams, roads and trails; for the strict prohibition of any cutting on areas of high scenic value or where logging might induce erosion; for partial cutting to a high diameter limit, so as to preserve a reasonably complete forest cover; and, generally, for a neat and workmanlike logging job.

Under this system of zoning, the present property owners are able to harvest their timber while still preserving the beauty of the landscape and providing for a continuous forest cover, the natural replacement of old trees by

To protect scenic values, no cutting was permitted within 100 feet (at least) of any lake shore or any travelled highway, or within 25 feet of any existing trail.

Man proposes, God disposes. No cutting of softwoods on this slope was permitted because of scenic and erosion control values. But then came the storm. Below: hardwood stand after cutting to 16-inch diameter limit.

new ones and the preservation of the soil. The Webb Covenant is a good example of a plan for rational, practical, multiple use.

Here is a sample of what can and does happen under present regulations: In the summer of 1950, approval was given for a timber harvest on an area between Big Moose Lake and the Fulton Chain, under the following restrictions:

No beech under 14", birch under 16" or maple under 18" to be cut. (No softwoods were cut under this agreement.)

Uncut strips 100 feet wide (and sometimes wider) to be left along the lake shores.

No cutting on the north side of Cascade Lake, on the steep slopes, its inlet or outlet, or on the steep slope of the north side of Moss Lake.

No cutting within 100 feet of any traveled highway or within 25 feet of either side of any foot trail.

Log haul roads that may be constructed on a side hill cut must follow as nearly as possible the contour, so as to reduce the danger of erosion.

Skidways and entrances on the reserved strips must be located by a Department Forester.

Almost a million feet of hardwood logs were removed in these operations. The landowner took off a harvest of timber without any real or permanent disturbance to the landscape, without making a mess of his woods and without interfering with their primary recreational use.

—A. J. Woodford, C. E. Mason

easy paddles

THERE was an article in our last issue describing a canoe trip in the vicinity of Raquette Lake that could be made in two days or two weeks. We have many such trips in New York, and the best of them are described in a bulletin which can be obtained free of charge from this Department.

But in addition, we have hundreds of miles of waters which have seldom been thought of or advertised as canoe routes. Yet there are opportunities here for those who just want to pass a quiet afternoon, or perhaps a weekend on the water, without going to the trouble of packing a heavy outfit or driving long distances into the wilderness. (But it usually pays to take a fishing rod.) These waters are safe for people who do not think of themselves as canoeists—people who tend to think of canoeing as rough work for only the experienced man or woman. We feel that these simple, inexpensive, short but enjoyable, family-style canoe trips ought to have a little more publicity, and so we present the following suggestions:

We've got plenty of water for short and easy canoe trips—family style outings

Upper Mohawk from Delta Dam to Rome. Start at Westernville on highway 46. Good current. Distance approximately 5 miles. Fishing good in Delta Lake for bass, walleyed pike.

Cayuta Lake near junction of highways 22 and 28 at Forestport via canal feeder to Boonville. Gentle current. Distance approximately 7 miles. Fishing for brown trout, bass, good along Black River.

Black Creek from near Gray, east of highway 8 beyond Cold Brook on secondary road. Nice paddle downstream with stiff current in places for 6 miles into Hinckley Reservoir. Fishing for trout, perch, bullheads fair to good.

West Canada Creek, Gravesville on highway 28 to Poland. Watch out for (and *do not* enter) the rapids at railroad tracks below Poland unless you are an expert. The trip from Middleville to Herkimer is a test for the expert whitewater fan when the water is high. At other times rocks are a barrier. The average canoeist of good caution ends the trip at Poland. Fishing for trout good.

The Kunjamuk from Moffitt Beach State Campsite on Sacandaga Lake near Speculator (highway 8) through inlet to Lake Pleasant and easterly to Sacandaga River outlet, soon branching left upstream into the Kunjamuk to Elm Lake. An easy paddle except for a few possible drags over beaver dams and around the man-made dam at Elm Lake. Fishing fair for silver chubs, bullheads.

Fall Stream inlet to Piseco Lake, to Vly Lake. One of the nice short paddles through a park-like stillwater with the flora and fauna of the north woods crowding in on both sides.

Start from highway 8 at head of Piseco Lake. Distance about 6 miles. Fishing fair for pickerel, yellow perch.

Unadilla River for several miles above Unadilla Forks from a point on highway 413. A nice stillwater. Below the Forks there are some good, deepwater stretches as far as the junction with the Susquehanna. Fishing good for trout, pickerel.

Fish Creek from west end of Oneida Lake via several miles of stillwater. Fishing good for bass, walleyed pike, chubs.

Delaware River, Hancock to Callicoon, and if you are experienced and have a good man in the bow, on to Port Jervis. Until the water gets too low this is a favorite run of the American Canoe Association. It's a test of one's ability to handle a canoe. Anyone who enjoys the thrill of whitewater in a canoe or kayak can have fun and get wet between Callicoon and Port Jervis over a weekend. The Delaware also offers good bass and walleye fishing. For more information write to Nick Dale at Narrowsburg.

When the water is high the trip by canoe from Margaretville down the Delaware East Branch can be an adventure. Brown trout here. Within a year or two most of this valley will be flooded and become part of the New York City water system, but in all probability will be open for canoeists.

Ramapo River in spring from Suffern to the sea will keep you busy for a day or more. Fishing fair for trout.

The Susquehanna, Cooperstown to Binghamton as described in a recent *National Geographic* issue is a fair trip in spring if the water is high but no fun in June, July or August. From Oneonta down, the trip can be great fun. Fishing good for bass, walleyes, pickerel.

Chenango River from Colgate University to Binghamton where it joins the Susquehanna. A delightful trip, through a beautiful valley, mostly farmland. A few short carries around riffs. Fishing good for bass, pickerel, panfish.

Hudson River above Hadley. Beautiful canoe trip upstream for several miles to Stony Point and beyond depending on water levels. Put in at Hadley. Fair bullhead, panfish fishing.

Champlain Canal-Lake George trip (as long as you want to make it). Good starting place at Fort Ann on highway U. S. 4. Two locks on way to Whitehall via canal to Lake Champlain. (Good side trip here into South Bay for pike, panfish and bass.) Down the Lake to Ticonderoga. Two-mile carry to Lake George, then south down Lake George to its head at Lake George Beach. Take a swim and get a snack at the fine new beach development. Then relax until your truck or car arrives to take you home. Distance about 90 miles. Scenic and historic. Prevailing winds on Lake George are S.W. and frequently strong and gusty, so be careful. Overnight cabins at Whitehall, Ticonderoga and all along Lake George, but they're apt to be crowded. Fishing good in Lake George, fair along canal.

Normanskill (Albany area). Good 4 to 6-mile paddle downstream depending on water level as far as New Scotland Avenue bridge. Fishing fair for bass, eels, chubs.

Alleghany River from Salamanca through Seneca Indian Reservation into Pennsylvania. Fishing good for smallmouth bass.

Sacandaga River West Branch from Arietta to Shaker Place S.E. of road from Caroga to Piseco. Ten or more miles of placid canoe water through typical Adirondack meadowland that should be of interest to the botanist and bird lover. Fishing fair for pickerel, perch, bullheads.

Oswegatchie Inlet to Cranberry Lake. Access from highway 3 five miles west of Wanakena. This is a 30-mile paddle upstream into virgin territory with two short carries and a few beaver dams to pull over. A good weekend wilderness trip of great charm in safe water. Two leantoes along the route. A few tent sites. Fair to good trout fishing.

Indian River from Eel Weir Campsite east of highway 87 near Ogdensburg. From campsite into Black Lake, to its head and into Indian River. Paddle upstream to Antwerp on highway 11. A placid stream through farm country with bass and pickerel fishing.

Question: Know any others? We'd be glad to hear about them, and so perhaps would our readers.

—A. T. SHOREY

Reference maps: 1. Published by the N. Y. Department of Public Works, showing State canals and waterways, State Office Building, Albany, N. Y.
2. "Water Travel," N. Y. State Conservationist, April-May 1950 issue. Free reprints available soon.

opinion

FISHERY RESEARCH

OUTSIDE of technical journals, fishery research has received relatively little publicity. Nevertheless, it has provided the basis for great progress in fish management. As recently as 30 years ago, fish management consisted mainly of indiscriminate stocking and more-or-less arbitrary regulations, while today, as the result of information produced by research, regulations are more realistic, stocking policies are based on the needs and capabilities of individual waters, and a number of new management tools such as stream and lake improvement, population control, coarse fish control and fertilization have been made available to the fishery manager. More dramatic results of research could be cited: For example, the development of the farm pond program, the creation of other new fishing waters, the restoration of brook trout fishing in ponds and the establishment of landlock salmon fishing. But the important point is that the research done to date has paid big dividends in maintaining and improving fishing.

Despite the progress that has been made, fish management faces a serious challenge. While management methods are constantly improving, the pressures that tend to deplete our fisheries are increasing enormously. Each decade of this century has seen an increase both in the number of fishermen and the number of fish caught, while the expansion of industry and the other demands of an increasing population have destroyed or spoiled many formerly good fishing waters. As a consequence, the paramount question has become: *Is it possible to maintain good fishing in the face of these ever increasing pressures?*

Most fisheries workers are fairly certain that the answer can be "yes," but they are even more certain that the job cannot be done with today's knowledge and methods. More factual information, indeed much more, is absolutely essential to develop improved and new management methods. Each body of water capable of supporting fish must be brought into full production. Even more than that, the basic productivity of individual units of water must be raised above today's level whenever possible. Wasteful and inefficient management practices must be eliminated and the money thus saved devoted to productive methods. Otherwise, the financial burden alone will constitute a serious threat to the maintenance of fishing.

The question may be properly asked: If more money should be spent on research, as has been suggested, how can the fishermen who pay the bill be assured that the money will be wisely spent? The best answer is that the small amount of money which has been spent on fishery research in the past (and it has been a very small part of most Conservation Agencies' budgets) has given excellent returns. There are certain conditions, however, which must be met if a research program is to be efficiently and successfully carried forward:

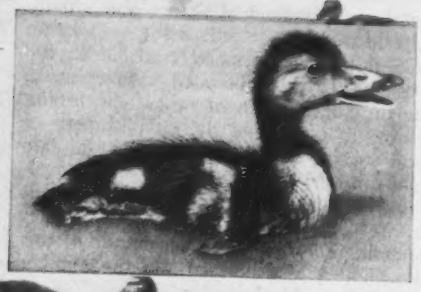
First, competent research personnel are needed. This means men who are both well trained and have research ability. The need is not only to recruit good research personnel but to *hold* them after they have become trained and experienced. The pronounced tendency for experienced research men to transfer to positions in administration and other fields has in some instances left research in the hands of young and inexperienced workers. If the greatest contributions are to be realized from research, it is imperative that working conditions and salaries be made attractive enough to hold experienced men in research work.

Second, proper supervision and administration are necessary to a sound research program. The selection and planning of projects and adequate supervision of the work are obviously important in guaranteeing that research will produce results at a reasonable cost.

Third, and of great importance, a research program to be successful must have public support. An interested and informed public through its support can insure that the research needed for better management of our fisheries resources is accomplished.

The days when fish management was based on guesses, opinions and trial and error are fast fading away. If we are to maintain fishing we have no choice; we must have continually improving management, and sound scientific research provides the only basis for the development of better management methods. The case for research has been described in many ways, but it can be summarized in one brief statement—more facts make better fishing. —W. M. LAWRENCE

debutantes of Delmar



RED HEAD

GADWALL

RUDDY

RING N

WHISTLER

LESSER SCAUP

SHOVELER

PINTAIL

MALLARD

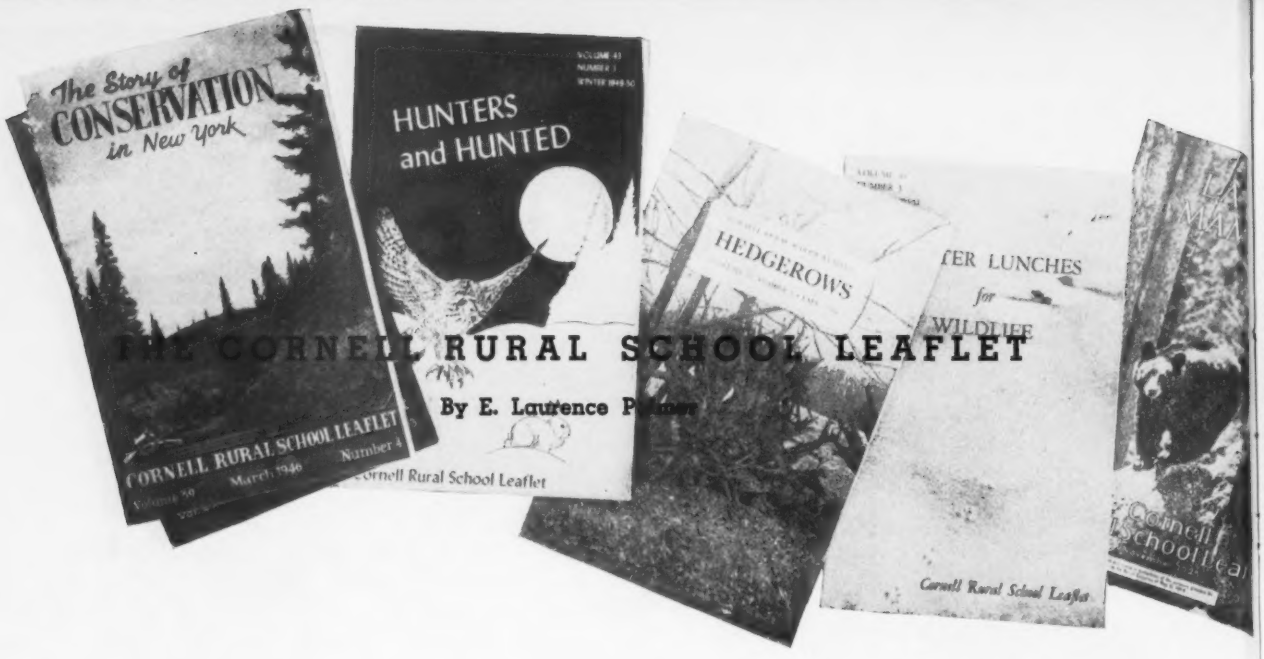
BLUE WINGED TEAL

BALDPATE

CANVASBACK

Wild duck eggs from western Canada's prairies, flown east by plane, were hatched this year at the Department's Delmar Game Farm. That "coming out" party was an important event for "quacker society" in this State.

The reason: The young ducks produced are the basic brood stock in our effort to introduce new species to the list of ducks breeding in New York and to the bag of our hunters



THE CORNELL RURAL SCHOOL LEAFLET

By E. Laurence Palmer

THIRTY-THREE years ago, in November 1919, I had the privilege of writing my first *Cornell Rural School Leaflet*. Earlier I had published articles on plant study in the September 1913 number. The November 1952 issue will probably be the last for which I shall have responsibility. I doubt if anything I have done during the forty-year span has given me more pleasure than attempting through the pages of the *Leaflet* to help rural New Yorkers understand the natural environment in which they are fortunate enough to live. In an age when dissatisfaction seems to be the style, it has been fun showing youngsters the good in things that are close at hand.

The *Leaflet* is a direct descendant of the Cornell *Junior Naturalists' Monthly* and of the earlier notes that "Uncle John" Spencer, Anna Botsford Comstock, Liberty Hyde Bailey and Martha Van Rensselaer wrote to rural New Yorkers. Miss Van Rensselaer and her associate, Miss Rose, founded the New York State College of Home Economics, Liberty Hyde Bailey was a major factor in developing the New York State College of Agriculture, and Anna Botsford Comstock reprinted her offerings in the *Handbook of Nature Study* which, 40 years after it first appeared as an aid to teachers, is still an educational "best seller." "Uncle John" left his mark on many youngsters like myself who owe to him a debt of gratitude for dignifying puddles, streams and woodlands which otherwise might have been meaningless to many of us.

I have tried during the time I have been responsible for the *Leaflet* to make it a guide to the out-of-doors, written in a style that any normal person can understand and enjoy. I have deliberately avoided the repetition which was so common a practice in the years that preceded my responsibility. For many years the *Leaflet* was the common vehicle for spreading information to junior club members (like 4-H Clubs and Future Farmers) as well as to the school. These groups now have their own channels of communication. It was my desire to make available in all rural schools small leaflets that could be used at any season of the year to understand woods, fields, waterways and oceans as well as the air, the sky and the principles of science. I have tried to help *Leaflet* readers understand man, in spite of early criticism from superior authorities. I have tried to broaden the scope of the *Leaflet* beyond the area of biology, which monopolized much of the program before I took the helm.

If I were to make any recommendations for the future of the *Leaflet*—now that I shall no longer be identified with it—they would be along these lines: Possibly the *Leaflet* would better serve its purpose if its name were changed to combine the two previously used names. Perhaps it should be callled the *Cornell Junior Naturalists' Leaflet*. Until I was given responsibility for the *Leaflet* it was available to all schools of the State. Immediately after I took charge the service was limited to communities of 4,500 or less, thus dropping all larger communities from our field of influence. It seems obvious that some provision should be made to service this great influential group of larger communities whose interests are so closely related to the success of rural areas.

The *Leaflet* has followed a rather consistent plan. Definite series have been established, some designed to help teachers and others to help children. Roughly the categories include systematic groups, ecological groups, physical science, domestic organisms, man, conservation, outdoor living, laboratories and teachers' problems.

The systematic numbers have dealt with stars, rocks, minerals, fossils, physiography, soils, microbes, herbs, woody plants, ferns, fungi, invertebrates, fish, reptiles, amphibians, birds, and mammals. We have considered little climates to help our readers understand larger climates, holes in the ground to help understand soil evolution. Always we have provided guidance in the management by man of the units under consideration.

The ecological numbers have dealt with fields, marshes, waterways, deserts and woodlands at different seasons of the year. The November 1952 number will complete the seasonal series on woodlands.

The outdoor living series has stressed campfires and campcookery, emergency science in the outdoors, safety, survival in winter, wild foods and outdoor living. This series could well be expanded in the future. It should present not merely a series of tricks or procedures but should develop scientific principles through outdoor living experience. The whole outdoor living movement is exerting increased influence on school work, and the *Leaflet* may have played a part

For many years the father of one of the most unique school journals in America, Dr. Palmer tells the story of his work in teaching Americans about themselves and their environment

in bringing at least a measure of support to the idea.

The conservation series is extensive and has been developed over a long time. The first two numbers I wrote in 1920 dealt with the conservation of mammals and game fishes and were supplemented by an article entitled "How the Cornell Rural School Leaflet Hopes to Teach Conservation Through Nature Study." At the time little thought was given to conservation in schools; there was no Division of Conservation Education in the State Conservation Department; and the Department showed little interest in reaching the schools. Fortunately such a situation no longer exists. The *Leaflet* and the activities of the Division of Conservation Education have been closely identified.

Leaflets on conservation have been devoted to such topics as saving the soils, vermin, conservation in New York State, cover, winter food for wildlife, hedgerows, wildfire, poisons, fish bait, and fish and fishing. At least four of the annual teacher's numbers have been given wholly to the teaching of conservation.

A series on physical science has presented numbers on heat, light, weight, sound, electricity and magnetism, chemical nature of matter, physical nature of matter, pounding and cutting tools—and so on. This series could well be elaborated in the future.

One of the most unique series has been the so-called "laboratory series." This was designed to show that through understanding little local areas we could better understand larger remote areas. Lawns have been little laboratories to help understand the great prairies that yield food and raiment. Study of a single woody plant helped in understanding forests that yield pulp, lumber and fuel. Dry sidewalks help in understanding dry deserts; and wet roofs help to give meaning to glaciers, waterfalls, rivers and lakes. A window has proved to be a whole natural laboratory that populates itself without cost, and in outdoor laboratories practically everything can be found that can be purchased from the biological supply houses.

A tradition to consider domestic organisms was part of our inheritance. We have not let this disappear. Leaflets on domestic mammals, domestic birds, cultivated plants, garden flowers and similar units have appeared.

We have recognized that man himself is a factor in the happiness of man wherever he may live. We have considered the Indians who lived longer in our State than has the white man. We have considered travel over land, over water and through the air. We have emphasized safety, the senses, and the human body as an organism that may be studied without taking it to pieces. We devoted one number to consideration of the finer sides of life. Of this number I am probably more proud than of any other.

The *Leaflet* appears four times a year, with three numbers designed for use by children and one for teachers. The teachers' numbers have considered grading problems, suggested library help and frequently have supplemented materials in State outlines. Our mailing lists are always cleared through the district superintendents and central school principals, some of whom have not always co-operated completely. We have been unable (because of the franking privilege) to advertise the availability of the *Leaflet*, but it is for sale at a low cost to any who wish it. We have a paid mailing list of several thousand subscribers.

It must not be implied from this article that the *Cornell Rural School Leaflet* is a one-man product. Through the years it has had the generous support of many interested in the work. Individual numbers have been prepared by Clayton B. Seagears and Nicholas Drahos, of the New York State Conservation Department; Leo Hadsall, of Fresno, California State College; Walter Thurber, of Cortland Teachers' College; Helen Ross, of Fitchburg, Massachusetts State Teachers' College; Lois Hutchings, of Kansas Wesleyan, and Emma Davis, Wilson Clark, Theodore Eckert, Paul Kellogg, and Eva Gordon, of the Cornell faculty. One number was prepared jointly with Gustave Timmel of Cortland Teachers' College and two numbers by committees of graduate students at Cornell. All numbers have reflected the co-operative criticisms of teachers and pupils over the State. To these, acknowledgement of obligation is readily given. Particular debt is due Eva Gordon, who may have immediate responsibility for the future *Leaflets*.

It is with much regret that I relinquish my major identity with the *Cornell Rural School Leaflet* (which might well be called the *Cornell Junior Naturalists' Leaflet*) to undertake other obligations which seem to offer great promise of service to a wider audience.

mushrooms

by DR. EUGENE C. OGDEN
State Botanist

Mushrooms of one kind or another are to be found at almost any time in New York from early spring to late fall, and in nearly all habitats. Everyone knows that some of them are welcome additions to the menu, but the fear of getting a poisonous one prevents many from taking advantage of the abundant harmless species.

The edible fungi pictured here have been chosen because they are often found in large quantities and, bearing no close resemblance to the poisonous kinds, can be easily recognized and safely eaten. But because of the necessary brevity of our remarks, the novice would do well to obtain additional information from one or more of the numerous books on mushrooms. A very satisfactory one is the New York State Museum Handbook No. 11, "A Popular Guide to the Higher Fungi (Mushrooms) of New York State," by Louis C. C. Krieger. We don't recommend the system of Dr. Peck, the first State Botanist of New York, who tested most of our mushrooms by eating them. But he died of old age. Of course he took a very small quantity of each at first.

The beginner should start with those that bear not the slightest resemblance to any harmful kinds, and many of these are shown here.

MOREL OR SPONGE MUSHROOM
(Morchella esculenta) Easy to recognize, delicious to eat. Usually appears in the spring after warm showers in limestone regions, old orchards, under shade trees, on old burns. Only possible confusion is with False Morel (top page 15), but distinction should be easy. Compare the photographs.

Those of us who prepare mushrooms for the table have our favorite methods. They may be fried, boiled, broiled, stewed, baked, sauteed, creamed, fricasseed, roasted, stuffed (in the case of Morels) or pickled. They may be made into soups, omelets, fritters, catsups, or what have you. They may be canned or dried for later use. Some throw them into the stew-pot fresh, others first put them into salted water for a few hours so that any insects that may live there are persuaded to crawl out.

Some mushrooms (like eggs) become tougher when over-cooked. A bit of baking soda (half a teaspoonful to a quart of sliced fungi) helps to keep them tender. When they are to be fried some of the tougher ones may be improved by a few minutes of parboiling. Some are improved by rolling in corn meal or dipped in egg and bread crumbs before frying.

One of the simplest methods is to lay them in the frying pan in which butter has been heated boiling hot. The butter not absorbed by the mushrooms can be thickened with a little flour and used as sauce. Most mushroom books give excellent recipes.

The hunter or fisherman in the woods without cooking utensils will find broiled mushrooms to be quite tasty, especially if a little butter (or olive oil) and seasoning are available. They are spitted on a green stick and turned over hot coals.

Care used in gathering mushrooms will save time in their preparation. Break them off well above the soil line and remove any adhering soil or debris while keeping the gills down.

Never use mushrooms that are even slightly decomposed. Harmless species may be poisonous after they have spoiled.

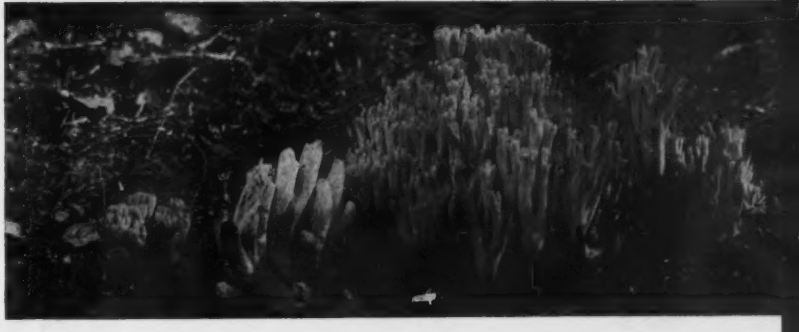
Their value as food for man is of but minor importance compared to their use as food for wild animals and their role in the decay and removal of dead plants, such as leaves and limbs of trees, thereby improving the soil.

FALSE MOREL
(Helvella infula or Gyromitra esculenta): Might be confused with the true Morel but note "brain tissue" appearance in photo at left. Conflicting reports about this species: some eat it regularly, others have been killed by it. Poisonous helvellic acid has been isolated from it. Boiling and pouring off water should render it harmless, but our advice is: don't take a chance!

MEADOW MUSHROOM
(Agaricus campestris or Psalliota campestris): Gather only those that have dark purple-brown gills, are short and thick, with a slight ring and no cup. If you follow these directions, you will not pick any Amanitas—the worst offenders. Found in open fields and pastures—not in the woods.

SHAGGY-MANE
(Coprinus comatus): Impossible to confuse this with anything else. Gills of mature plant are black and begin to decompose and droop with age until the whole plant collapses to form an inky blob. Found in the autumn in pastures, waste places, lawns and especially in nitrogen-rich soil. Known also as "inky-cap."

CORAL MUSHROOM
(Clavaria spp.): Most mushroom eaters gather coral mushrooms without regard to species, considering all (and there are many species) to be wholesome. A few are tasteless or bitter, most are delicious. They should be firm and fresh and free from insects. Quite abundant in most shady woods.



PUFFBALL

(Lycoperdon gemmatum) The species of Lycoperdon and Calvatia are called puffballs and all are safe and tasty if flesh is white and firm. Care should be taken to distinguish from umbrella-type mushrooms in the "button" stage, which when cut longitudinally will show the line separating gills from stem. Some puffballs grow up to 20 inches across.

BEARS'-HEAD

(Hydnum caput-ursi): Found only on trees, and so distinctive and so safe to eat that it needs no description. The fleshy, downward-hanging teeth distinguish this from all unwholesome types.

OYSTER MUSHROOM

(Pleurotus): Grows on wood — either living or dead trees, or fallen logs, mostly hardwoods. Often found in great abundance, and persists into November, making a welcome addition to the hunter's meal. May be dried for winter use. One of the chief causes of hollow trees, as it decays mostly in the heartwood.

SULPHUR OR CHICKEN MUSHROOM

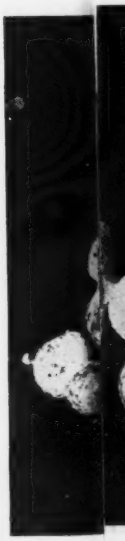
(Polyporus sulphureus): Very beautiful, bright sulphur-yellow, orange or reddish areas especially at the margins. Found only on trees, standing or fallen. Flesh is firm but tender. Only the young parts should be used as the bases may be tough.

DEATH-ANGEL

(Amanita phalloides): Responsible for most deaths occurring from eating mushrooms. Learn to recognize it; avoid eating anything that looks at all like it. Very common. Usually found in woods, also found in open, cleared areas. Gills white, pink or yellowish; stem usually long with a ring near upper part. At base of stem should be tissues simulating a cup, but often not clearly defined.

FLY MUSHROOM

(Amanita muscaria): Known to be deadly, but some have eaten it without harm. Like the death-angel, very common in New York and found in both woods and pastures. Deadly to flies that suck juice from the cap (hence the name). Easy to recognize; see back cover.



Pat Cunningham

THERE are people up in the Adirondacks who still talk about how Pat Cunningham put out the big fire in Chapel Pond Pass. That was in 1913, and it was a bad one—so bad that troops from the Plattsburg barracks were called out to fight it. Pat had specific orders from Albany not to start a backfire (that might get out of control too), but he explained later with a nice innocent smile that he often had trouble getting in touch with Albany in those days, so he put a long row of dynamite sticks in the ground and blasted a fire line, and then started a backfire. He had everything figured just right, and that was the end of the fire in Chapel Pond Pass.

Pat's father and mother came over from Donegal, Ireland, just after the Civil War and settled down and brought up their children in Chestertown. Pat's first real job was with the VerPlanck Colvin survey. For three years he was an axeman, blazing some of the many boundaries of the Forest Preserve. Then at various times he was a lumberjack, a steamboat captain on Long Lake, guide, hotel proprietor, farmer, and the proud possessor of a full length coonskin coat.

He lost the coat shortly after he signed up with the Conservation Department as a Patrolman (now Ranger) in 1908. It seems the Department provided him with a Model T that was really a hot rod, because when Pat used his coat to cover the radiator one winter day the coonskins went up in smoke. The Model T went the same route a few years later. That was when the wind changed while Pat was fighting a fire up at Tahawus, but there are those who believe that he anticipated this shift and parked his car accordingly. He needed a new one.

Pat was District Ranger, with headquarters in North Creek, from 1911 until he retired 30 years later. He had an instinctive knowledge of how to fight fires, and when it came to building fire towers he knew where to put them and how to build them. Twelve now stand as monuments to him. At the same time he was a leading citizen of the town, fighting for a new school, buying land and planting trees on it, lending money where it was needed most, making friends everywhere.

Pat died on June 3, 80 years old. Those here who knew him say he was a great Ranger, one of the best. But most of all they say that he was a kindly man.

—P. W. Fosburgh

CONSERVATION in our business

By LYMAN BEEMAN
president, Finch, Pruyn and Company, Inc.

SOME people look upon industrial owners of Adirondack timberlands as organizations not interested in conservation—even opposed to it; organizations active only as exploiters of the forest land and destroyers of forest reserves.

Possibly there are still industrial owners who take such a view toward conservation; I can speak here only for our own company, Finch, Pruyn. But for half a century we have been the largest private landowner in the Adirondacks, and if we had operated our lands without regard for conservation, I cannot see how we could still be in business, and still retain our lands.

It must have been generally true, however, that indiscriminate exploitation of our forest reserves occured during the 19th Century, and it is certainly true that such was the case in earlier times, when any clearing of the land was considered beneficial. The results of this exploitation first came to the public notice following the Civil War, mainly because of the great increase in tax delinquency. At tax sales held by the Comptroller of the State in 1871, 1877 and 1881, nearly a million acres of forest land was acquired by the State for delinquent taxes. It soon became apparent that this great area of wild land needed management and protection, and the Legislature responded by creating the Forest Preserve and the New York Forest Commission, which set up an office in the capitol building in 1885. Instead of management and protection, however, the Preserve thereafter was subject to as much exploitation as ever—through crooked sale of cutting rights and downright stealing of State timber. Scandal after scandal occurred, involving employees of the Commission and even Commissioners themselves, until the situation was met in the Constitutional Convention of 1894 by the adoption of the drastic Section 7 of Article 7 of the Constitution. Now renumbered Article XIV, Section 1, the same provisions are in force to this day. One can easily understand why the convention felt that the only way to meet the desperately bad situation was by radical action which meant, in effect, sterilization of the productivity of the Preserve.

Times change, however, and it is important that people recognize the situation as it truly exists in the middle of the 20th Century. Industrial timberland owners in the Adirondack area today are more interested in conservation in the Adirondack forest, and do more about it, than any other group, including those banded together for the express purpose of protecting the forest. Why shouldn't they? Their managers and employees not only love this country and find their recreation in it, but also depend upon it for their livelihood, for the success and permanence of their business. Where would their manufacturing plants be without the clean process water and water power these forests protect? Where would they be without the raw materials these forests grow?

In expressing this deep interest of industry in conserving and protecting the woodlands, probably the most important activity has been the part played in fire prevention. The record is excellent and equalled in few places. It could have been established only by close co-operation between State agencies and large private owners, with diligence and close management on the part of both. It could not have been done by one alone.

The record has been made in spite of the inaccessibility of many State lands and the absence of any silvicultural management on them. But great danger now hangs over the Adirondacks because of the heavy blowdown of over-mature trees. These are now on the ground, dry and ripe to explode in a terrible conflagation. Fire protection depends largely upon accessibility and management of wood lands. In the past, destruction from fire came from neglect and the fires produced by neglect; destruction now or in the future will come from poor management or restrictions prohibiting management.

The year 1911 seems to mark the time when many people began to think seriously in terms of improving the handling of the Adirondack area. In that year Gifford Pinchot was invited to investigate the status of forestry in New York, and his report expressed the opinion that forestry was being practiced everywhere in the State except in the woods. He condemned the policy of restriction in the Preserve and made a plea for an amendment to the Constitution to permit cutting under scientific forestry principles. Partly because of the stimulus of Mr. Pinchot's visit and his enthusiasm for forest conservation practice, our company instituted a planned cutting and silviculture practice under the management of a professional forester. Politicians under the leadership of Tammany were able to kill the movement toward conservation as recommended by Mr. Pinchot for lands in the Preserve. But privately-owned lands continued to be brought under management.

In the 40 years since then, industrial

owners have made another contribution second only to fire protection in preserving our forests. This is their study of methods and procedure (and the gathering of a mass of data) designed to promote the best growth of trees, protection to watersheds and propagation of game. On our company's lands these studies started in 1911 with the big job of cruising and mapping the holding. That took several years and enlisted the work of many foresters.

The purchase and retention of forest property by our company had been originally made to supply raw material for our Glens Falls mills—saw logs for the sawmill, and pulpwood for the paper mill. But in time the sawmill was shut down and the whole raw material emphasis shifted to supplying spruce and balsam in perpetuity to the enlarged paper mill. Some of the lands we acquired had supported virgin stands of nearly pure softwood, but through heavy cutting of softwood the stands had become mixed with poor quality hardwood growth. One of the first moves to insure a supply of spruce and balsam was to help Nature get back to the natural softwood forest by killing many of the hard woods.

Girdling was the method adopted. In 1916 fourteen plots of one acre each were measured out in typical areas, the weed trees girdled, and a careful record made of trees standing and of the character of soil and climate. By 1920 the resulting improvement in growth was so evident that a program of girdling was decided upon, and by 1926 a total of 7,000 acres had been girdled in locations where the test plots indicated the greatest response. Many people, however, questioned the desirability and profitability of this type of forest management, and to be conservative a rest period of eight years was taken. But at the end of this period our confidence was unshaken, and in 1934 the girdling was resumed. Since then, 1,000 acres have been covered each year (except for the five war years). During this period of 36 years, close check and study of the test plots and girdling areas has been continuous, and the results have been a remarkably faster growth (with replacement of poor trees by merchantable ones) and a generally more healthy forest.

The U. S. Forest Service and Cornell University have co-operated closely in making silviculture studies of all kinds on our lands. In 1932 a special area of 640 acres on route 28N near Newcomb was set aside as a joint project in the study and development of cutting and growing practices. On another lot in this area the U. S. Forest Service collaborated with Finch, Pruyn in a special cutting study started in 1932 on four plots of 30 acres each. One of these plots was clear cut, a second cut by Finch, Pruyn's standard method, a third by U. S. Forest Service standard, and on a fourth no cutting was done, but weed trees were killed by girdling. On adjacent State land a control plot was measured out for observation. These plots have been cruised at intervals of five years to give data and information on the relative effects of these different methods of handling.

At another location, 1,000 acres was set aside in 1932 for special observation after cutting by the Finch, Pruyn standard method. The basis of the study in this area is a 2½ per cent cruise every five years. One of the interesting points about this 1,000 acres is that it was selected by the Forest Service as an observation and measurement area for spruce budworm control.

THROUGHOUT the 40 years that have passed since Gifford Pinchot's visit, a harvest of wood has been taken off our company's lands and a practical set of rules and cutting techniques has been developed for the choppers. The foresters were a separate technical group in the beginning, distinct from the lumberjack group. But now the technical and the practical have been so merged that the operating methods are completely dominated by the ideas of the trained foresters. Marking of trees to be cut was based originally almost entirely on diameter; now we know that not only diameter is important, but the vigor and health (and resistance to wind throw) of the trees to be left. Now various diameter limits are used in different locations, although in general we wish to leave any spruce tree under 10" diameter breast high. No vigorous young trees are allowed to be cut or injured except where safety of the woodsmen is involved.

The information that we have gained over the years is available to anyone. It has been freely used by State and Federal agencies and by many forestry schools. It is written into our company's practice standards as co-operators under the Forest Practice Act. We have gone a long way toward learning what trees to cut and what trees to keep growing, what species are best suited to the varying soils and climatic conditions, how to guard against insect and disease depredation, how to leave forest stands in the best condition for fighting any fires which may occur. It has been proven to our satisfaction that a cutting forest and a preservation forest can be one and the same under good management. In the modern conception, trees are no longer considered part of the soil, but are living things where growth is life.

Best forest conditions for tree growth and game abundance follow the same pattern. There is no conflict. They go hand in hand. The managed lands produce better hunting than the unmanaged.

The next step forward is to build a new general plan taking advantage of all knowledge, new and old, to better serve all people interested in the Adirondack country. That will not be an easy step because of many factions, many points of view and many selfish interests. Tolerance and co-operation will be essential.

Among those who deeply love these mountains and forests, the most ardent and vocal is the group that recognize the aesthetic values as the most important. And who would challenge them—as he stands in the virgin spruce which border the little pond nestling between the three peaks on Santanoni, or kicking the blood red snow of a winter sunset atop Pilot Knob? A new plan can and must give wider protection to the high peaks and slopes, selected virgin stands of timber, ponds and streams and other beautiful places. But in fact, proper protection cannot be given such places while other locations hold fire inviting jungles or breeding nests for insect pests. The great fires of the past produced thousands of burned acres of State land, since healed with transition type forests but now—if only for safety's sake—badly in need of management and care.

In planning for our forest lands, other interests of a more selfish nature must be understood and considered. Some land owners fear competition to their holdings if State lands were yielding a harvest. Others fear that higher taxes might result for them in certain towns through disturbing their present sheltered position with the State carrying the principle tax burden. And a few individuals and clubs have acquired areas giving them preferred access to State lands, and they wish no change which would threaten their privileges.

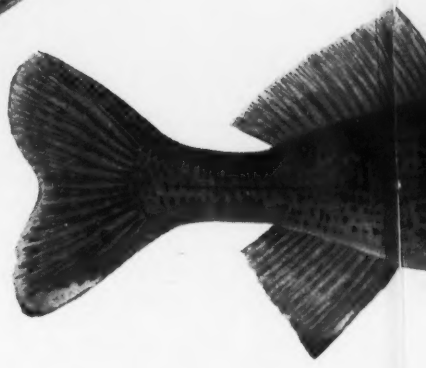
Industrial timberland owners could in many instances take the narrow, short-term view of selfish gain and oppose any change in Article XIV, Section 1 of the Constitution. Immediately, they stand to lose—not gain—by any change. But I believe they are solidly behind improved Adirondack management for the good of all and thus in the end the greatest good for each.

WARM WATER GAME FISH

—John R. Greeley,
Chief Aquatic Biologist

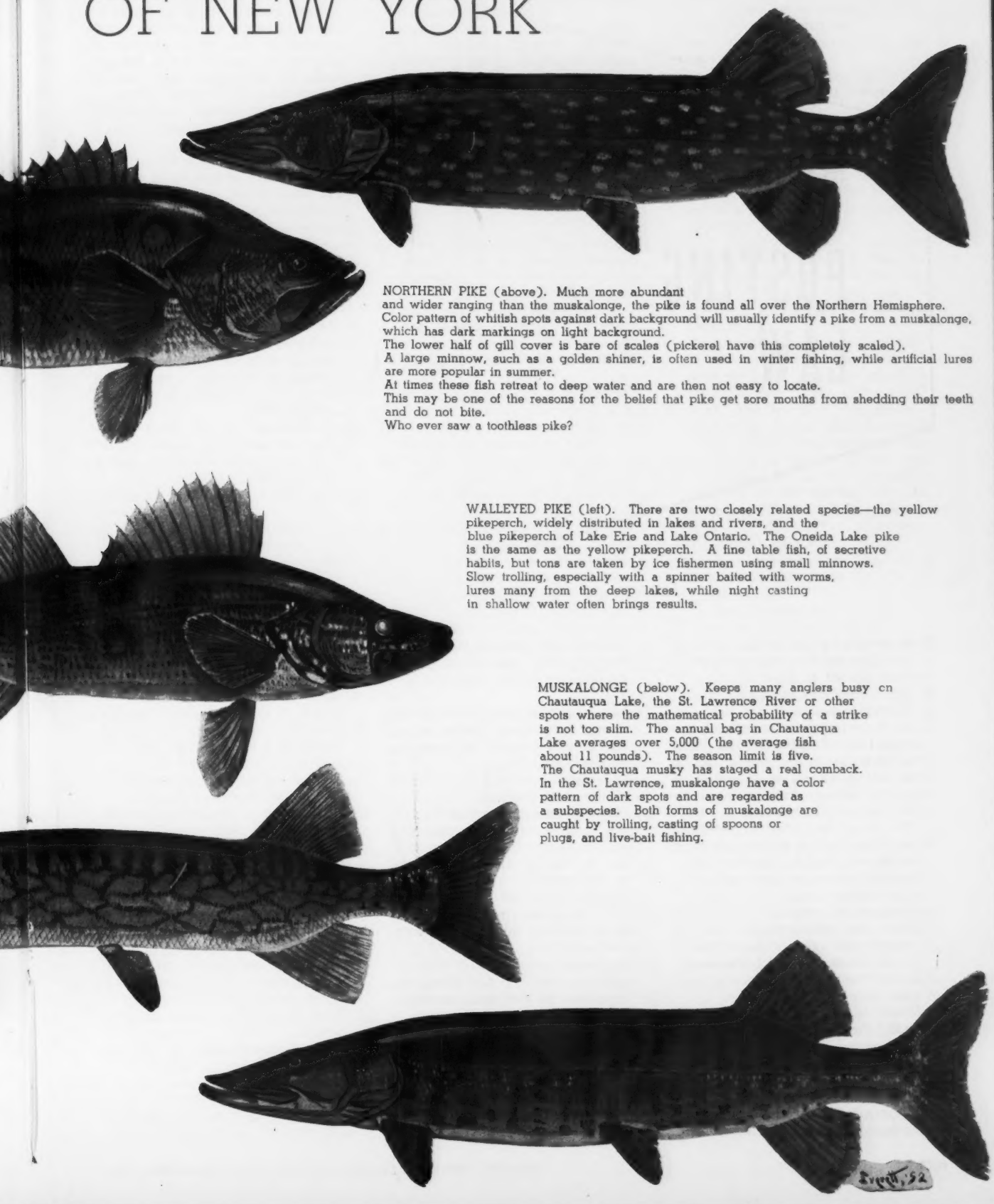
LARGEMOUTH BASS (right). New York anglers of today will find many more of this species than their grandfathers did. Presumably the weedy bays and coves along the Great Lakes always produced some, and the name "Oswego bass" dates from far back. In numerous interior lakes and farm ponds, however, the largemouth has been introduced (it has recently appeared in Lake George). Southern waters still produce the record breakers, but in the warm, shallow waters of many of our lakes, casting with plugs, popping bugs or spinning lures brings many smashing strikes, followed by powerful surface runs and dives into weed beds.

SMALLMOUTH BASS (above). From the famous black bass grounds of the Lake Ontario-St. Lawrence region, and from interior lakes and rivers, well over a half million smallmouth are landed annually by thousands of anglers. Most fishermen agree with the verdict of the late Dr. J. A. Henshall; "Inch for inch and pound for pound, the gamest fish that swims." The great popularity of the smallmouth has resulted in widespread introduction. The bass was native to many of the lowland lakes but not to the mountain regions. In general its spread has been a desirable event, although natural spawning frequently supplies more mouths than can be provided with sufficient minnows and crayfish for fast growth. Result: stunting. Smallmouth bass have a chance to reach old age (12 to 14 years) only by retreating to deep water and becoming really discriminating in their attitude toward fishermen's lures.



CHAIN PICKEREL (right). The numerous lakes of southeastern and central New York provide homes for pickerel. In up-state sections often confused with northern pike, true pickerel have the gill-cover region completely covered with scales and also have a different color pattern. From May 1 until cold weather, countless pickerel are taken on artificial lures or live bait and as soon as the ice is safe, on the live minnows of ice fishermen. Although rarely over three pounds, a chain pickerel has the same ferocity and dash as its heavyweight relative, the muskalonge. Too often the majority of the large pickerel in a lake is caught— one reason why many small lakes have been closed to the use of tip-ups. The predatory habit of the fish is recognized as a benefit in most lakes where panfish or undesirable species need some natural check against overpopulation.

OF NEW YORK



NORTHERN PIKE (above). Much more abundant and wider ranging than the muskalonge, the pike is found all over the Northern Hemisphere. Color pattern of whitish spots against dark background will usually identify a pike from a muskalonge, which has dark markings on light background.
The lower half of gill cover is bare of scales (pickerel have this completely scaled).
A large minnow, such as a golden shiner, is often used in winter fishing, while artificial lures are more popular in summer.
At times these fish retreat to deep water and are then not easy to locate.
This may be one of the reasons for the belief that pike get sore mouths from shedding their teeth and do not bite.
Who ever saw a toothless pike?

WALLEYED PIKE (left). There are two closely related species—the yellow pikeperch, widely distributed in lakes and rivers, and the blue pikeperch of Lake Erie and Lake Ontario. The Oneida Lake pike is the same as the yellow pikeperch. A fine table fish, of secretive habits, but tons are taken by ice fishermen using small minnows. Slow trolling, especially with a spinner baited with worms, lures many from the deep lakes, while night casting in shallow water often brings results.

MUSKALONGE (below). Keeps many anglers busy on Chautauqua Lake, the St. Lawrence River or other spots where the mathematical probability of a strike is not too slim. The annual bag in Chautauqua Lake averages over 5,000 (the average fish about 11 pounds). The season limit is five.
The Chautauqua musky has staged a real comback.
In the St. Lawrence, muskalonge have a color pattern of dark spots and are regarded as a subspecies. Both forms of muskalonge are caught by trolling, casting of spoons or plugs, and live-bait fishing.

THE POSTING LAW

Q. *Is provision made in the Conservation Law for the posting of private lands against trespass?*

A. Yes, both lands and waters.

Q. *Who may post?*

A. An owner or person having exclusive right to hunt upon enclosed lands or lands used in whole or in part for farming purposes, or an owner or person having exclusive right to take fish in private waters.

Q. *If an owner has permitted the stocking of his lands or waters with game or fish supplied by the State, may he post against trespass under the Conservation Law?*

A. Lands and waters may not be posted under the Conservation Law if stocked with game or fish supplied by the State, with the knowledge and consent of the owner, at any time since April 17, 1896.

Q. *When lands or waters are posted under the Conservation Law, are they posted against all forms of trespass or only hunting, trapping and fishing?*

A. They are posted against all forms of trespass unless the notices or signboards along the boundaries indicate to the contrary.

Q. *May a person post only a part of his property against trespass?*

A. Yes.

Q. *May a person post a stream traversing his property against fishing and permit hunting and trapping on his lands?*

A. Yes, but this should be indicated on the posting notices.

Q. *May a person post against hunting only, and permit fishing and trapping?*

A. Yes, by having the wording used on the notices or signboards so indicate.

Q. *How does one post one's farm against trespass under the Conservation Law?*

A. By placing conspicuous notices or signboards close to and along the boundaries of the lands or waters to be closed to the public.

Q. *Any particular size of sign that must be used?*

A. Yes, notices or signboards must be at least 11 inches square.

Q. *Any particular wording that must be used on notices or signboards?*

A. No, the word "POSTED" set forth in conspicuous lettering is deemed sufficient if it covers an area of not less than 80 square inches of the notice, exclusive of the name and address of the person posting. Such name and address must appear on all notices.

Q. *How many notices or signboards must be used in posting lands or waters?*

A. At least one notice must be posted on each side of such lands and one at each corner, provided that said corner can be reasonably ascertained.

Q. *How close must notices or signboards be when placed in position?*

A. Not more than 40 rods apart.

Q. *When lands or waters are posted in the manner provided by the Conservation Law, for what length of time is the posting effective?*

A. Indefinitely, so long as the person posting replaces illegible or destroyed notices at least once a year during the months of March, July, August or September.

Q. *Is it necessary to post lands or waters with notices or signboards in order to keep an undesirable person off one's lands or waters?*

A. No. The Conservation Law deems it due service of notice upon any person to serve him personally in the name of the owner of such land with a notice in writing containing the same warning as the posted notice above described.

Q. *What is the effect of posting lands or waters under the Conservation Law?*

A. All persons are prohibited from trespassing or entering upon private lands or waters after notices are posted as described above or after personal service in the name of the owner of a notice in writing containing a description of the premises and warning against trespassing or entering thereon.

Q. *Is it a crime to trespass on lands or waters posted under the Conservation Law?*

A. Yes, it is a misdemeanor.

Q. *Does the Conservation Department prosecute violators of the trespass law?*

A. Only when the trespass committed consists of hunting, fishing or trapping, or disturbing fish or game. Simple trespass must be prosecuted by the person posting.

Q. *What fines and penalties are provided?*

A. A person found guilty of trespass is liable to a fine of from $10 to $100 for the first offense, and in addition thereto is liable to a penalty of from $10 to $50, together with costs of suit in addition to ac-

tual damages, all of which may be recovered in the same action.

Q. *If lands are not posted and a person hunting thereon damages private property, do any of the provisions of the Conservation Law apply in such case?*

A. Yes. Any person who while hunting, fishing or trapping shall, without permission of the owner, lessee or lawful occupant, enter upon the land of another and while thereon shall kill or injure any dog, livestock or domestic fowl or shall cut, destroy or damage any bars, gates or fence or shall leave open any bars or gates resulting in damage to the owner or occupant, is guilty of a misdemeanor, and in addition thereto is liable to a penalty of $50, one-half of which shall be payable to the owner thereof, and in addition thereto is liable to the actual damages, which shall be paid to the owner.

Q. *Does the person upon whose lands or waters the trespass takes place receive any part of the fine or penalty?*

A. No. All fines and penalties collected are deposited to the credit of the Conservation Fund.

Q. *Who may hunt, fish and trap on posted lands and waters?*

A. Any person with permission of the person posting.

Q. *Is written permission of the person posting necessary?*

A. No, but the law provides that written permission shall be a bar to prosecution for trespass.

Q. *Is it a crime for a person wilfully to post lands or waters he has no legal right to post?*

A. Yes. A person who wilfully and with intent to deceive places or causes to be placed close to and along the boundaries of any land or water he has no legal right to post, any notice, signboard or poster containing words or symbols tending falsely to identify the lands or waters is guilty of a misdemeanor, and in addition thereto is liable for civil penalties.

Q. *Is there any punishment provided for malicious destruction of posters or signboards?*

A. Yes. A person who injures, defaces or removes a "No Trespass" notice or signboard commits a misdemeanor and may be prosecuted accordingly.

Q. *Does the Conservation Department furnish to persons posting lands and waters blank forms that may be used in granting permission to others to hunt, trap and fish on their posted property?*

A. Yes. Such printed blank forms are furnished free of charge.

Q. *May the owner or lessee of posted lands or waters charge for the privilege of hunting, trapping or fishing thereon?*

A. Yes. But the charge must be made solely for the privilege of entering upon the posted property; it must not be based on amount of fish or game taken.

Q. *Does the Conservation Department furnish game or fish for stocking posted lands or waters?*

A. No.

Q. *What is the effect of an owner of posted lands or waters knowingly permitting the stocking of his posted property with fish or game supplied by the Department?*

A. The posting of his lands or waters, whichever the case may be, under the Conservation Law is null and void.

Q. *If an owner or lessee of private lands or waters stocks the same at his own expense with game or fish, may he take the same at any time?*

A. Except on licensed shooting preserves and licensed farm fish ponds, the same laws which regulate taking of game and fish on public lands and waters regulate such taking on private lands and waters.

Q. *May a person wade a stream which traverses posted lands, provided entry is made at a point not posted?*

A. No. Not unless the posted notices indicate that fishing is allowed.

Q. *May a person standing on unposted lands cast his fishing line into posted waters?*

A. No.

Q. *May a hunter who has wounded game which escapes to posted lands pursue it?*

A. Not without first obtaining permission from the person in whose name the lands are posted.

Q. *Is a person who posts his property against trespass required to register such fact with the Conservation Department?*

A. No.

Q. *How should the owner or lessee of posted property go about prosecuting a person for trespass?*

A. If he witnessed the trespass, he may make the arrest and prosecute the case himself; or, he may request a Game Protector for assistance in prosecuting the case.

Q. *If the status of private lands and waters is such that they may not be posted under the Conservation Law, may they be posted under any other law?*

A. Yes. Under the Common Law.

Q. *Is the Conservation Department obligated to take any action in trespass cases where the posting is done under the Common Law?*

A. No. The Department takes no action in such cases.

Q. *Does a landowner have a legal right to put a fence across a stream that traverses his property?*

A. Yes, if he owns the bed of the stream and the fence is erected within his property line.

Q. *Does a landowner have a legal right to place a screen or other obstruction in a stream which traverses his property?*

A. The Conservation Law prohibits the placing of a screen or other obstruction which prevents the free passage of fish in a stream, unless a permit is first obtained from the Department.

Q. *Does a landowner have a legal right to erect a dam on a stream which traverses his property and of which he holds title to the bed thereof?*

A. Yes. The law does not define a dam as an obstruction. A permit from the State Department of Public Works is required if the dam (a) exceeds 10 feet in height above the bed of the stream, (b) impounds over one million gallons of water, or (c) drains an area greater than one square mile.

Q. *Does a landowner own the bed of a stream which flows through his property?*

A. He may or may not.

Q. *How can this be determined?*

A. By examination of the landowner's deed to the property, a copy of which is on file in the office of the County Clerk of the county in which the waters in question are situated.

Q. *If the stream forms the boundary line between two pieces of property, and the bank on one side is posted while the bank on the other side is not, is the stream open to public fishing?*

A. It may or may not be open, depending on the deed to the property. Some titles extend to the water's edge, some to the middle of the stream, and some to high water mark on the opposite shore. Deed in County Clerk's office should be consulted when in doubt.

Q. *Can a lakeshore owner fill in a lake in front of his holding in order to extend his property?*

A. Yes, if he owns the bed of the lake he intends to fill, or has obtained a grant from the Board of Claims of the State of New York, if title to the bed rests in the State.

—JUSTIN T. MAHONEY,
Director, Fish and Game

PIT BURNING CHARCOAL

Joe Timber and his coal pit

CHARCOAL, to most of us, is a lustrous, light-weight, brittle black solid that comes in quarter bushel paper bags, makes a clean, hot fire on which to roast picnic hamburgers and hot dogs. At today's prices it is strictly a luxury product, and often unprocurable because of the erratic supply.

Yet only a century ago, charcoal was the basic industrial fuel and the only one that could be used for smelting iron ore. As a result, the woodlands within reach of the early iron furnaces were cut clear for charcoal wood, leaving vast areas of stump-land—to the consternation of many an early conservationist.

This apprehension can be better understood when we note that in the 1880's, the Chateaugay Ore & Iron Co. was consuming the virgin forests of Clinton and Franklin counties at a rate of more than 2,000 acres annually. A bit farther south, the J. & J. Rogers Iron Co. at Ausable Forks was skinning another 1,000 acres a year. Our early center of iron production extended from the lower Hudson Valley north to the Canadian border and around the northern Adirondacks as far as St. Lawrence County. Each furnace drew its charcoal supply from the nearby woods, in an ever-widening circle, and the effects of their wood procurement operations can still be seen in square mile after square mile of even-aged hardwood forest that replaced the original uneven-aged, mixed timber.

The making of charcoal is a very ancient art, stemming back to the very beginning of civilization. Fundamentally it consists of heating wood under some sort of cover, in the presence of just enough air to burn the gases which are driven off, leaving behind almost pure carbon. This was first done in a pit dug into the ground. Presently, the pit was abandoned and a covered heap built on top of the ground, for better draft control and greater ease in handling the coal. However, the old names stick; in eastern New York at least, the heap is still called a "coal pit" and the product "pit-burned charcoal."

With the coming of coke for blast furnace fuel, iron production in New York declined and the charcoal business faded. The great bulk market, where a charcoal burner could always be sure of selling his coal, disappeared, and with it the race of woodchoppers who made a living at a laborious and dusty trade. Gone from the mountain roads are the high-racked charcoal wagons. Gone from the mountain air is the pungent smell of coalpit smoke. Gone are the charcoal burners—almost.

The hills east of the Hudson River, in Columbia and Rensselaer counties, were for long a center of charcoal burning. Soon after settlement, charcoal became an important "cash crop", for it was light enough and valuable enough to stand considerable transportation even over the rough roads of those early days. Some of it went west to the more populous areas along the River, but most of it was hauled south. At Ancram, Robert Livingston, a grandson of the first Lord of the Manor, had established an iron works in 1748, based on local charcoal and iron ore brought in from nearby Salisbury, Connecticut. A century later the Copake Iron Works started up, just a few miles to the north. At peak production, this latter consumed nearly half a million bushels of charcoal a year—quite a drain on the local forest resource.

In the charcoal business, Ancram and Copake are only names now, the sites of their once busy iron works marked by slag heaps, waste ore and the cold and silent masonry of their abandoned furnaces. Scattered over the hills are still to be found the old coalpit floors, little patches of carefully leveled ground covered with a layer of carbon chips and surrounded by little rings of earth—feeble but enduring monuments to the once numerous clan of colliers.

But, on the hills back of Troy, there are still a few men who burn charcoal in the ancient, time-honored way. One of these is Joe Timber, who lives on the road between Taborton and the Dutch Church, right on top of the mountain. Joe was born 79 years ago on the place north of where he now lives, and he has always lived and worked on the mountain. He has been burning coal pits more than 50 years.

The first essential for making charcoal is a good floor. This is a carefully leveled area, say 30 feet across, from which all sod and woody material has been removed (such stuff burns) and all the rocks grubbed out (they explode when they get hot). The soil must be porous enough to drain well without letting too much air up through. And it must be so situated that surface water and rainfall drain away. Old floors are best, for they have been thoroughly burned out and the soil pores pretty well filled with charcoal dust.

The denser hardwoods—beech, birch, maple and oak—made the heaviest and best charcoal. The softer hardwoods, like aspen, produced a coal that was clean but light. Softwoods were seldom used; pine and spruce gave off too much tar, while hemlock snapped and crackled too much. Besides, the yield from softwoods was unsatisfactory.

Wood for coaling was air-dried; green wood took extra fuel and extra time to cook the water out and the resulting steam, if pocketed, might cause an explosion and blow a hole in the covering. The wood was cut 4 feet long. Sticks over 6 or 7 inches were split so as to insure charring all the way through. But there was no minimum size and the men who cut charcoal wood took everything except the softwoods and used everything except the smallest branchwood.

The sticks were piled on end to form a hemispherical mound, usually about

10 feet high and 25 feet in diameter. This was covered with a layer of hay or ferns and then with a mixture of sod, earth and charcoal dust, to form an air-tight but flexible cover. The pit was fired from the top through a hole down into the pile. When the fire got going good, the pit was capped and a ring of holes poked in the covering just below the top. Cooking proceeded from the top downward. As the steam and gases were driven off or burned off, the pit shrank and the cover had to be patched and pounded down to keep it tight. For a ten-cord pit, burning took about two weeks, after which another week was required to cool it down.

When the fire was all out and the pit cooled, the covering was removed, the charcoal broken up, screened and sacked for market.

Good hardwood was rated to yield 32 bushels of coal to the cord, poorer wood somewhat less. That means that a ten-cord pit made about 1,300 quarter-bushel sacks. At today's prices, that is real money. But burning coal is a tedious, time-consuming job, with a 24 hour day rain or shine and nothing extra for overtime. While a burning pit does not require much actual labor, it has to be watched all the time. One small explosion of steam or a sudden settling can break the cover; it must be patched immediately or the pit will burst into flame and work and wood all go up in one big blaze. And no dirtier job was ever found than screening coal, for the charcoal dust flies all over and gets into everything. At the end of a day's work sacking charcoal, the only clean thing about a man is the

If, this summer, you buy a bag of charcoal somewhere in the Capitol District, it may well be good pit-burned coal made by Joe Timber or one of his neighbors in the same way it was made a hundred years ago.

—David B. Cook,
Roland B. Miller

saratoga lake

LOCATION:

Southeastern Saratoga County on Route 9P a few miles south of Saratoga Springs.

PHYSICAL FEATURES:

Area—4,339.2 acres
Elevation—204 feet
Maximum depth—96 feet; 340 acres over 40 feet; 1,400 acres less than 30 feet (where most fish life exists)
Length—8½ miles
Maximum width—1½ miles

CHEMICAL CHARACTERISTICS:

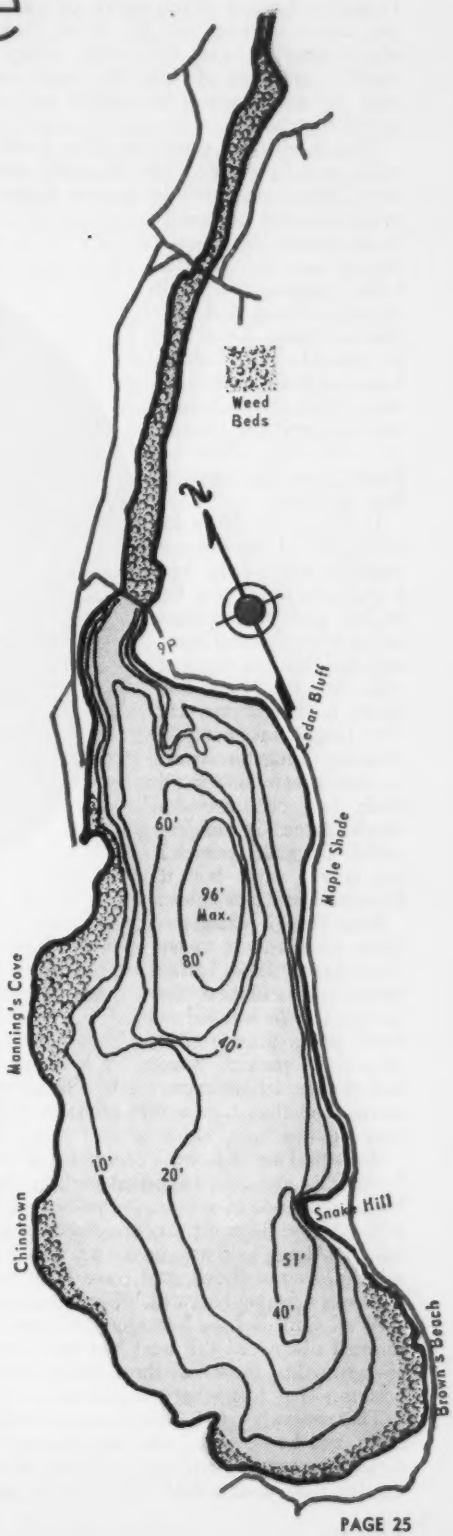
Water—warm, game-fish type
pH—slightly alkaline
Oxygen—good except in deepest parts, so that it is not suitable for lake trout
Plant life—Plenty of weed beds on south and west sides and entire northern arm

FISH:

Conditions for fish life are ideal, with high rate of production. Contains 25 species; those caught by anglers are: Common bullhead, chain pickerel, northern pike, yellow perch, walleyes, smallmouth and largemouth bass, common sunfish, red-bellied sunfish, eel. There are many bait and forage fish. Walleyes and bass are widely scattered throughout the lake, while pickerel, northern pike and panfish are mostly found in or near the weed beds and more shallow parts of the lake

GENERAL:

Plenty of boat liveries and accommodations for fishermen are available



FRENCH LEWIE

By Gerald Kenwell

LOOKING back on my 60 odd years as a resident of the Central Adirondacks, I believe French Lewie was the greatest character of all whom I had the privilege to meet and come to know very well. In fact, we became the best of friends. This French Lewie came from France to America at the age of 17 and started his American career working on the Black River Canal, during which time he got into some mixup with the other canalers and took off into the woods and lumber camps near Speculator where he worked as a lumberjack for a period of time.

This lumberjack experience gave Lewie the call of the wilds, and he decided that he could make an easier and more interesting living by getting deeper into the woods to hermit, trap and guide. So he moved into what is known as the Canada Lakes region and built himself a camp, first near Pillsbury Lake. Then later he moved to West Canada Lake and built himself another camp at which location he spent the remainder of his days which extended over fifty years at that location.

It was at the latter location that I became acquainted with Lewie. And a break for me it was, for he had spent several years in the woods by that time, and had learned many a trick on the trap line which he taught me. He also taught me many a trick for caring for myself in the woods under all kinds of circumstances which came in mighty useful in later years. I was only a small boy at the time I first met Lewie.

Now for his characteristics: First I want to say that Lewie had more steam and ambition for his size (for he was only a small man, around 140 lbs.) but packed more wallop than I have ever seen in a small package. He never spent more than four or five hours in bed; the rest of the time he was busy, either around camp or on a trapline.

And speaking of Lewie's energy I will have to illustrate it by one instance that happened back in the spring of 1906. I was taking one of my usual snowshoe trips from Inlet back to the Moose River country one day during the latter part of March. About half way in on my trip I crossed a stream called Governor Brook, and there lying atop the snow and crust was a fishing boat which I recognized as one I had seen at West Canada Lake belonging to Lewie. From my observation I discovered this boat had only been there a couple of days. Also, there was three inches of ice frozen in the bottom. That was what puzzled me.

That following fall I happened to get over to Lewie's camp, and Lewie said, "Yes, that was my boat you see over there." It seems there was a fellow from down around Clinton who made a deal with Lewie to deliver this boat to his camp at Lime Kiln for a certain figure. So Lewie was transporting the boat from West Canada Lake to Lime Kiln on a hand sleigh while the March crust was on, which was a distance of about 25 miles over one mountain after another.

I said: "Lewie, why did you haul all that ice in the boat?" His answer: "It take too much time to thaw him out so I take ice and all." There must have been at least 200 lbs. of ice in the boat and the boat itself I would judge weighed 150 lbs., making a total of 350 lbs. he had hauled twenty-five miles over those mountains. He must have belonged to the ant family.

The first thing he did when he established himself at West Canada Lake was to clear off a couple acres of land to raise himself a garden to aid in the food supply. Then I recall one time I was up there I found him with a flock of 100 hens. I said to him: "Lewie, what in the world do you want so many hens around for?" The answer was: "I keep the hen to pick the bug off the garden." Then I asked: "What do you do with all the eggs (for at least there must have been a cord of eggs piled up in one corner of the camp)?" The answer: "I boil them up and mix with venison an' potatoes and feed them back to the hen." To me it looked like just a merry-go-round, but he had his own philosophy.

Lewie was the one man that showed me how to capture a fisher alive. One time I went to his camp for a visit and under his stairway that went up into the loft he had a live fisher wired in. I said: "Lewie, how in God's heavens did you ever get that thing here alive and what have you got him here for?" The first answer was: "Oh, he easy to get. You just chase him in hole in ledge or hollow log, then you set trap on crotch of long pole and shove in where fisher is. He's just like cat, he spit and strike at it and spring trap, then you pull him out. Fisher he's just like bulldog, he grab onto anything that smells like man and hangs on. So I take off my overalls and tie on stick, he grab it. I pick him up and shove in bag and bring him home."

The next question answered was that it was a little early in the season, so he wanted to keep the fisher alive until the pelt became prime.

Lewie had many outpost trapping camps arranged all through the woods at intervals of six or eight miles apart, just small overnight camps which I would like to describe but it would take up too much space. It would be a book by itself and would take someone like Louise Rich to write it.

Lewie was the most expert otter trapper I ever ran across. So good in fact that I could never find an otter track within 15 miles of his domain. Lewie was an extravagant

trapper as far as game was concerned. I was snowshoeing across country on one of my trips to Canada Lake the latter part of December and crossed a small pond with a rocky island in the center, and in the crevices of rocks I discovered five deer carcasses piled up in one spot. When I reached Lewie's camp I asked him about it and he acknowledged he did it and that lots of bait attracted lots of foxes so he could catch them. But of course it didn't matter much in those days for there was no one traveling that country but Lewie and occasionally someone like myself just passing through there.

In all the years Lewie was around water he never learned to swim, and he was telling me a story one time of making a trip in late March from West Canada over to the Otter Brook. On his course he came across Brook Trout Lake, and on his way back later that afternoon he got out within 50 feet of a big sloping rock in Brook Trout and broke through the ice into about eight feet of water. He said: "I swim to bottom just like stone, but I keep eyes open and walk on bottom to this rock and climb up rock to surface. I believe you see my fingernail marks on rock yet."

The winter of 1908 I made a trip on snowshoes to West Canada in the latter part of February with a fellow who was curious to see Lewie. Arriving at Lewie's camp, there was a big beef paunch under the same stairway where previously I had seen the live fisher. I said: "Lewie what in the world are you doing with that in here?" His answer was: "I want him to get ripe so fox smell him long way; too cold outdoors to get ripe." I guess it was getting ripe. It was quite evident at the time.

He had not seen any company since early fall before, neither had he washed a dish or cleaned the camp, which had a bad affect on my companion for he was very sensitive and spleeny, therefore he didn't eat enough in the two days we were visiting Lewie to keep a sparrow alive. But I was familiar with Lewie's housekeeping so I didn't pay much attention. I simply went ahead and cleaned up the end of the table we wanted to use, and washed and scalded the dishes we needed and we had our own supplies. I knew what we had to eat was clean, so why be fussy about anything else? But during the cleanup operation I started on the table dishes Lewie had been using, for both the plate and cup he had in use had a rim of black and mold around the edges three-quarters of an inch wide by a quarter inch thick. Lewie saw me start to clean his gear and yelled at me: "Gerald, don't touch him. He's got the flavor right on him just like I like him."

After the clean-up job Lewie said: "Gerald, what kind of meat you fellows want, some venison or fish?" "Well," I said, "Lewie, I believe fish would be preferable for I haven't had any since last summer." So he says, "Go out in ice house and pick out fish you want." So I went out to the ice house and such a sight I never saw. This ice house I would say was around 12 feet square, with one layer of ice left in it, and that whole surface was one solid sheet of trout. Both brook and lake trout. So I picked out two 1½ lb. speckled trout and took them back into the camp and said to Lewie: "For Heavens sake, what do you do with so many fish?" His reply was: "He's the best bait for trapline there is, for fisher, marten and mink." "Well," I said, "how much fish do you use to the cubby?" He said: "Some times whole fish, some times half fish." Just imagine. Some of those lake trout I would judge ran up to ten pounds or better, and in that case he used a half fish for one cubby. But when you think of it, why not? There wasn't another man within 30 miles of there to catch the fish and that amount didn't make much impression on that large area.

Lewie went out to civilization twice a year for supplies, usually to Speculator, and supplies consisted of flour, beans, salt pork, salt and tea. The rest he got in the woods. He had his own fish and meat, raised his own vegetables, such as he wanted. He made his own sugar from the maples and he bought very few clothes. I have seen him with as many as six or seven patches thick on his pants and the patch material ran all the way from pieces of underwear to socks, and occasionally a piece of deer skin.

Lewie's trading was in the barter form and like most woods hermits he liked his fling when outside. He would go out with a pack of furs and throw a mink skin on the bar and say, "Give the boys a drink," with usually some change back. But as he got further under the influence he would fling out an otter skin from his pack, with no change back; the next round would have to be a fresh skin. But I guess the bartenders had the right system for Lewie's benefit, for he couldn't stay at it too long. The skins were soon gone, so was Lewie—back to the woods to get more skins. Then six months later, back out to try it over again.

Lewie could neither read or write, but he was a natural woodsman. Long before we had the Geological Survey of this section, Lewie would take a pencil and sketch me a map of the country with the mountains, streams, lakes and watersheds, and tell me where to go. And the map was perfect, similar to the ones we have today, only it didn't have elevations.

Time meant very little to Lewie for he went visiting another trapping hermit one spring in March, by name of Frank Baker who lived about twenty miles away. When he went into Baker's camp he asked Baker if it was Sunday. Baker told him no, it was Thursday. Then Lewie asked what month it was and Baker told him it was March. "Well," Lewie said, "I thought it must be getting along towards spring, for I struck my ax into a maple and the sap ran out." That was one of Lewie's ways of keeping track of what time of year it was.

SO went Lewie's life and it is a fair example of all our pioneer boys' life, carefree, regular American pioneer freedom. They had no radio, automobiles, electric lights or any such conveniences, but what did they care? They never heard of them. But what they did have was real American freedom.

In my short span of life I have seen rapid changes, from the freedom day of Lewie to the advance of civilization chasing up on your heels dictating what you should do and what you can't do, etc. I believe I like Lewie's life better.

Finally Lewie made his last trip out to civilization in the spring of 1915. He must have been in his 80's then. I never knew his exact age, and doubt if he did. However, he couldn't stand the shock of a fling any longer and passed over the Divide, thus ending the career of a noted woodsman and pioneer. By the way, his real name was Lewie Seymoure.

[This copy is published just as it came in from Gerald Kenwell, who says that what with his guiding and camp-tending chores up at his place on Otter Brook, he didn't have much time to check on some of the facts and figures about French Lewie. In any case, there are conflicting stories about his origin: some say that he came from France, others that he was born on a farm near Ottawa. The circumstances of his death are better known. He put in a good evening at the bar of the Brooks' Hotel in Speculator, drinking with Pants Lawrence, and died the next day. The official record reads: "Louis Seymour died February 28, 1915, age about 84 years. Occupation: guide. Birthplace: Ottawa, Canada. Father and birthplace of father: unknown. Mother and birthplace of mother: unknown."]

THE BACK OF THE BOOK

SCATTERSHOTS AND DEPARTMENT ACTIVITIES

COCKROACH IN DUCK SOUP?

Des Moines, Iowa,
June 30, 1952

Dear Messrs Duryea and Fosburgh:

The bill of fare served by your CONSERVATIONIST magazine is so consistently excellent that no one should ever get more than constructively critical of it, even when one finds that a cockroach has fallen into the soup when no one was looking.

I have just been looking over the "Current Problems" in your issue for June-July, and came across your declaration of war over the zoning of Long Island with Connecticut, or rather the failure to do so.

Of course as an old-time duck hunter, dating back to the years when we really had ducks, I am just as sorry for myself as you or anyone else has ever been over the shooting restrictions. I used to raise hell about them and tell all the one-gallus shooters that they were being unfairly treated by a lot of numbskulls down in Washington who didn't know anything about ducks. That was before they called me in to take over as Chief of the old Biological Survey, the bureau which used to write the shooting regulations for migratory waterfowl. And I hope you will pardon me for butting in on the controversy on zoning, but I know how to settle the war between you and the Fish and Wildlife Service before it starts.

Not waiting to be asked, the answer is: Just try to figure out a zoning pattern for the ducks and the hunters in the U. S. A. that would give all the hunters an even break and still leave enough ducks at the end of the season to insure a normal crop for the next breeding season. And may I suggest a point which is generally overlooked by most people, and you in particular in your declaration of war over the zoning pattern for New York and Long Island.

It was not always so, but in this day of super-highways and air travel hunters are just about as migratory as the migratory waterfowl. Hunters stream across zoning borders all over the continent, from New England to California and from the Canadian border to Louisiana, thereby stretching their shooting seasons and of course killing more ducks. The easy migration of hunters makes the zoning problem very tough. Zoning Long Island with Connecticut, while ecologically justifiable from the migratory waterfowl standpoint, would give all the mainland hunters from New York, and Jersey too for that matter, a double-length shooting season, and double or triple the pressure on the duck population on the Atlantic flyway.

For instance, it is just as easy for a hunter to go from Yonkers or Poughkeepsie to Montauk Point or Plum Gut as it is to go from Flushing. I've done all three. If we could only breed non-migratory hunters, I am sure Al. Day and the Fish and Wildlife Service would be quite happy to zone Long Island with Connecticut. And I can name at least twenty similar situations in our North American flyways. It's simple enough to figure out patterns by which everyone would be more happy but would kill more ducks. Our problem is to keep them happy while killing less, for with every 20,000 new shotguns sold we either have to kill less per gun or raise more ducks. It is not as easy as it looks.

I still maintain you publish a helluva good magazine!

Yours very truly,
(Signed) *Ding Darling*
Jay N. Darling,
c/o Register and Tribune,
Des Moines, Iowa

July 18, 1952

Dear Mr. Darling:

It was a very welcome surprise to receive your letter, and it gives me a real lift to find that you're a regular reader of our magazine and that you think so well of it. After all, the name Ding Darling is synonymous with progressive conservation to just about everybody in the country—so praise from you means a great deal to us. Again, my sincere thanks.

Now for the cockroach that fell into the duck soup. To begin with, you raise a point that has always troubled us here—that our efforts to get a better duck season would be misconstrued as merely a selfish move to provide more hunting for New Yorkers than they justly deserve. But I am sure a look at the record will show pretty clearly that we're good conservationists—and not just interested in killing more ducks. I don't think I am bragging when I say that I believe our waterfowl research and management program is as good as any in the country, and I think the Fish and Wildlife Service itself would go along with me on that. We've spent quite a lot of time and money to produce more ducks here in New

York, so it just wouldn't make sense for us to advocate a gunning season that we thought might wipe out all the gains we've made.

In asking for zoning, I don't think we're suggesting such a season. But having improved our management program, I don't think it is unreasonable to ask the Service to improve its pattern of regulations. Since you are a regular reader of our magazine, you must be familiar with our arguments on this subject—so there is no use in rehearsing them here. But, we're for zoning simply because we think it would give us a season that conforms both with biological needs and with the principle of fair play as it applies to hunting opportunity.

You say the Service would no doubt accept the zoning principle if we could breed non-migratory hunters. Frankly, I doubt very much if there would be any extensive migration of hunters from zone to zone in New York. There are just not enough open hunting spots and enough people with plenty of money and free time to make a substantial migration of hunters possible. The duck hunters we have who *do* migrate go well beyond the borders of our State. But, if I am wrong—if a fair trial of zoning indicates that it results in too heavy a kill—then we'll abide by the verdict, and gladly.

You say if we want zoning we ought to breed non-migratory hunters. I say if the Service *doesn't* want zoning, it ought to breed ducks that can recognize State lines.

Again, many thanks for your kind words about *The Conservationist*. And I do believe that if you were back in your old job as Director of the Service and could see the mass of data we have accumulated on this subject of duck seasons, you would go along with us in our contention that zoning deserves at least a fair trial.

Yours very truly,
PERRY B. DURYEA,
Commissioner

STURGEON BAND

According to a recent band record, it took a sturgeon six years to grow from 34 inches to the legal 42. That may not be par for the course, but probably is pretty close to it.

Conservation tag #1819 was put on the sturgeon October 3, 1946 when it was 34 inches long and weighed seven pounds. It was retaken April 30, 1952, in the Long Saulte Rapids of the St. Lawrence off Massena—not far from where it had been liberated originally. When recaptured, it was 42½ inches long and weighed 16¼ pounds.

DINGELL-JOHNSON

With the sum of $83,843.66 becoming available to New York under the first year of operation of the Federal Aid to Fisheries (Dingell-Johnson) Act, projects to improve fishing have been organized. In basic plan of operation, Dingell-Johnson is similar to the Pittman-Robertson Act applying to wildlife restoration, although D-J is not only younger but much smaller. Both funds originate from federal excise taxes. Despite the great popularity of fishing, the annual tax on fishing equipment yields much less than that on hunting equipment, including ammunition. Both federal aid programs are based upon 75 per cent federal share and 25 per cent state contribution. Since D-J funds are derived from taxes paid ultimately by the angler, they may be used only for projects contributing to restoration of sports fishing.

Seven projects have been selected that will supplement our usual fish management work. These are:

Weakfish Project: One of the most popular game fish in Long Island waters, the weakfish, has recently shown an alarming decline in abundance. The factors concerned are not well understood. A thorough study of the weakfish, including tagging to determine details of migration, is in operation and will be continued for at least three years under the immediate direction of Dr. Alfred Perlmutter, Senior Aquatic Biologist (Marine District).

Electric Shocker: New York, largely through pioneer work conducted by D. C. Haskell, Superintendent of the Rome fish hatchery, helped get electric fishing apparatus started toward its present prominence. By enabling biologists to study fish populations more accurately, electric shockers (which stun but do not kill fish) help improve stocking recommendations and other management. Further testing and improvement of such apparatus is needed and a project under Mr. Haskell's immediate supervision is under way.

Selective Breeding of Trout: In the pressure of producing more fish, fish culturists have not followed selective breeding to the fullest extent considered desirable. One pressing problem is to breed for disease resistance and thus eventually decrease expenses due to loss from furunculosis and ulcer disease. To succeed in this, the selective breeding must be done so as to maintain favorable wild characteristics of the trout. This important, long-time study is under way at the Rome hatchery under direction of Dr. Louis Wolf, Senior Fish Pathologist, with the advisory co-operation of Cornell University geneticists.

Trout Stream Improvement: Many anglers have already become familiar with the work which has been done on a fraction of the 740 miles of stream on which public fishing rights have been acquired. This work, in charge of Emerson James, Supervisor of Fish Management, includes improvement of the streams by means of structures, bank planting and other fish habitat changes; also the marking of signs and development of parking area for cars.

Restoration of Trout Fishing in a chain of connected waters: This project is similar in type to the reclamation work already successfully completed on a number of Adirondack ponds where undesirable fish have been destroyed by use of rotenone and trout have been stocked. So far, however, no complete chain of lakes, ponds and streams has been so handled. The headwaters of the West Branch of St. Regis River have been selected and, within a period of years, will be used to test and demonstrate methods which are expected to be widely useful in developing similar trout management in other areas. This work is being directed by the Adirondack Fisheries District, in charge of Dr. W. M. Lawrence, Senior Aquatic Biologist.

Management of Farm Fish Ponds and Bait Ponds: In recent years numerous ponds have been constructed on farms. They differ in size, temperature and other important details, and research is necessary to work out fish management techniques for warm-water species, trout, or bait production under New York State conditions. Cornell University and the Conservation Department are co-operating in a project to study existing fish pond management, set up new experiments and make results available to persons interested in managing fish ponds. Headquarters are at Ithaca at the Department of Conservation, Cornell University, where ponds within a considerable radius are available for study.

Acquisitions: Areas for public fishing are still a recognized need in many parts of the State. A major part of the time of one man has been made available under the D-J program to secure desirable fishing areas through purchase of lands or fishing rights easements. This project will supplement the former program of acquiring fishing rights.

JUNIOR HYDRAULIC ENGINEER

Salary: From $4,053.16 at time of appointment to $4,889.76 in five annual increases. This salary range includes the present cost of living adjustment.
Civil Service Status: Competitive civil service. Personnel recruited by means of open-competitive examination. (See note).
Positions (Number and Location): There is one position in each of the offices of the Division of Water Power and Control at Jamaica and Albany.
Promotion Opportunities: There is a direct line of promotion to the higher grade positions of Assistant Hydraulic Engineer.
Working Conditions: Work is performed both in the office and in the field. The basic working week is five days and 40 hours. Employees earn 20 days vacation each year and one day of sick leave credit each month. Unused sick leave may be accumulated to a maximum of 150 days. Reimbursement is made for expenses incurred on official business away from headquarters office.
Retirement: Membership in Retirement System compulsory. Employee contributes on a payroll deduction basis. Variety of retirement benefits.
Duties: Under direct supervision, assists in engineering work in connection with the supervision, control or protection of water supply systems and related hydraulic structures. Investigating proposed or completed projects involving the development of new or additional sources of public water supply or the construction of work appurtenant thereto. Investigating the construction and operation of all types of wells for the production and use of water for commercial, industrial, and air conditioning purposes, and the design and construction of works for the drainage of lands for agricultural purposes, or for the regulation or improvement of the flow of streams for power, commercial or industrial uses. Performing general engineering work in the office including assistance to other engineers in making engineering calculations in connection with the work of the office. Preparing record maps for office use and reviewing proposed plans and specifications.
Qualification Requirements: *Physical:* Good physical condition, and freedom from any disabling mental or physical defects. *Education:* Graduation from college from a four-year course for which a bachelor's degree in engineering is granted. *Experience:* One year of satisfactory experience in the field of hydraulic engineering, or in the supervision or operation of a private or municipally operated public water supply system. *Note:* One year of experience as described or two years of satisfactory general engineering experience may be substituted for each year of college training lacking.
Special Knowledges and Skills: Good knowledge of the principles and practices of hydraulics relating to the design, construction, and operation of hydraulic structures for the control, distribution and use of water from both surface and ground sources. Ability to assist in the review of plans and specifications involving water supply and prepare reports thereon. Possess resourcefulness, ability to meet public, initiative, reliability, thoroughness, and good engineering judgment.
Note: *An open competitive examination is being held for this position on September 27, 1952. For that reason this position has been described rather than Junior Sanitary Engineer as indicated in the June-July issue of* The Conservationist. *Applications for this examination can be obtained from the New York State Civil Service Department, Albany, New York. The last date for filing applications is August 22, 1952.*

HUNGARIANS

Just a year ago we carried an article on the Hungarian partridge population in the State, pointing out there are "More Huns Than You Think" and proposing the harvest (by open season) of the substantial surpluses which are lost periodically through excessive winter kill.

Now the Department's Game Managers in the principal Hungarian partridge range in the northern part of the State report that their inventories show peak populations again. So they are in the process of preparing recommendations for a limited season.

It looks like the northern gunners, who have pretty poor pheasant shooting, will have an opportunity to hunt Huns for the first time this fall. A trial season seems worthwhile.

SALVAGE REPORT (9)

In spite of the fact that the pulpwood market is still very weak and the paper mills of the State operating on a four or five-day week, there was removed from the various forest fire hazard reduction projects in the blow-down between May 1 and June 30, 1952, approximately 21,000 cords of pulpwood and 3,000,000 feet of sawlogs.

Two additional contracts were also executed during the period and 10 projects were reported as having been satisfactorily completed by the contractors. These consisted of six in the Catskill and four in the Adirondack area. They were for the most part of relatively small size and included only 715 acres in various isolated locations. The receipts total $21,658.

STATUS JUNE 30, 1952

	Contracts executed	Contracts unsold	Total
No. contracts	128	38	166
Acres	101,237	72,445	173,682
Cords	228,161	219,601	447,762
MBF	26,901.5	6,875	33,776.5
Estimated receipts	$989,417	$768,076	$1,757,493

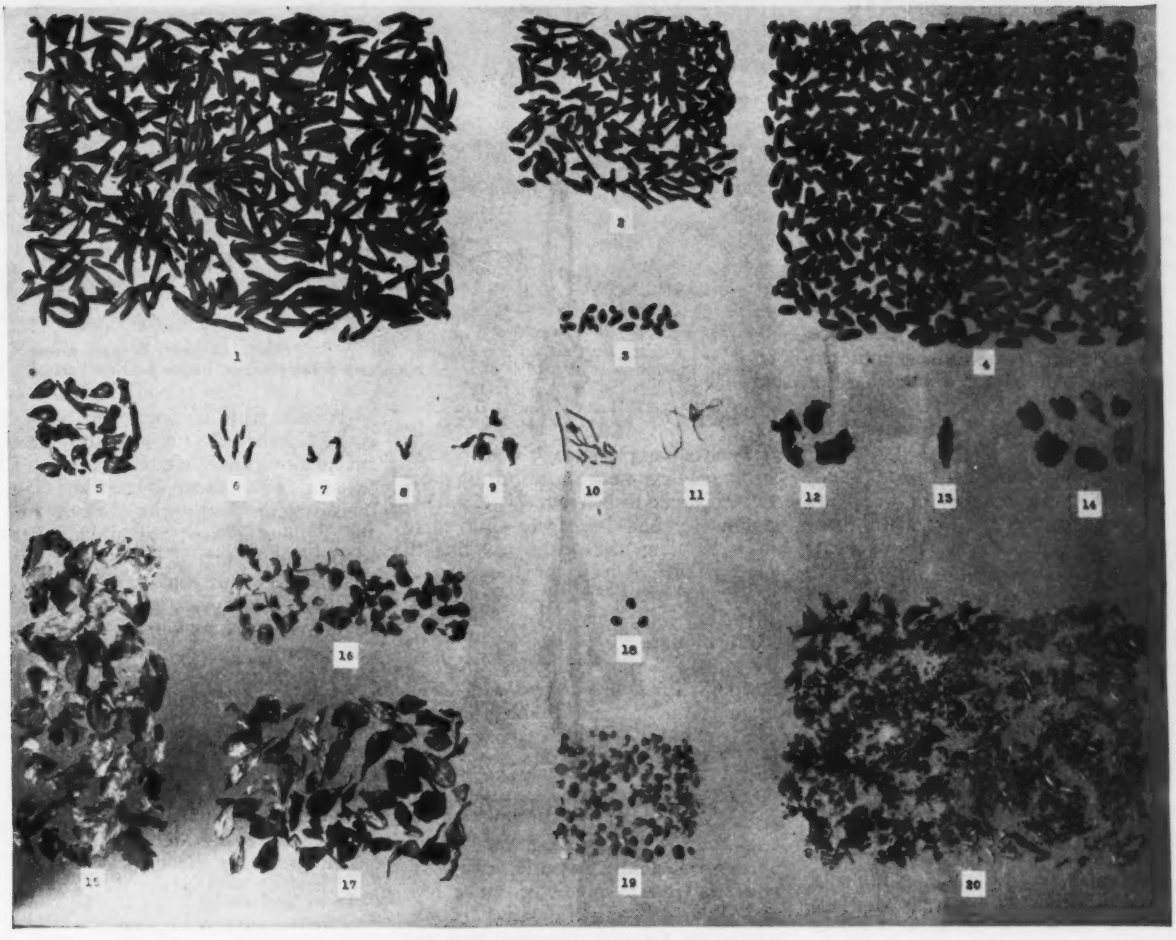
RECEIPTS TO JUNE 30, 1952

	Cords	Receipts
Softwood	145,220.35	$461,671.11
Hard wood	541.14	1,056.83
Total pulpwood	145,761.49	$462,727.94

	Sawlogs	Receipts
Softwood sawlogs	8,369.790	$68,767.99
Hardwood sawlogs	5,059.145	69,712.52
Total sawlogs	13,428.935	$137,480.51
Total pulpwood and sawlogs		$600,208.45
Local sales		32,451.06
Total cash receipts		$632,659.51
Campsite salvage, estimated value		48,480.00
Grand total		$681,139.51

Work has been initiated on 101 of the 128 contracts executed. Recent inspections of the various contract salvage operations made by a Supervising Forester from the Albany office indicate the most excellent co-operation on the part of industry in carrying out the provisions of the contracts, and in particular those provisions relating to forest fire reduction. All completed projects are now being checked from the Albany office before the contractors are released from their faithful performance bond. An examination of the areas cut over last summer and early fall indicates that the provision in the contract requiring the lopping of tops to the terminal bud has proved to be of very substantial help in hastening the decay of the tops and thereby lessening the forest fire hazard. This is due primarily to the growing up of plants, sprouts and seedlings on the cut-over areas, as well as to the winter snows.

—A. S. Hopkins,
Director, Lands and Forests.



WHAT DOES A GROUSE EAT?

Crop and gizzard contents of a ruffed grouse collected in Clinton County in mid-December

(1) 542 catkins of Hop-hornbeam (*Ostrya virginiana*)—32%; (2) 162 buds of Hop-hornbeam—18%; (3) 16 buds of Beaked Hazelnut (*Corylus cornuta*)—1%; (4) 448 catkins of Beaked Hazelnut—31%; (5) 18 buds of Trembling Aspen (*Populus tremuloides*)—2%; (6) Five buds of Shadbush (*Amelanchier sp.*)—trace; (7) Three buds of Sweet Fern (*Comptonia peregrina*)—trace; (8) Small bit of Moss (*Musci*)—trace; (9) Frond tips of Evergreen Wood Fern (*Dryopteris sp.*)—trace; (10) Needles of White Pine (*Pinus strobus*)—trace; (11) Tips of Blue Grass blades (*Poa sp.*)—trace; (12) Leaves of False Miterwort (*Tiarella cordifolia*)—trace; (13) Leaf, probably Goldenrod (*Solidago sp.*)—trace; (14) Leaves of Speedwell (*Veronica sp.*)—1%; (15) Leaves of Strawberry (*Frageria sp.*)—8%; (16) Leaves of Clover (*Trifolium sp.*)—2%; (17) Leaves of Everlasting, or Pussytoes (*Antennaria sp.*)—5%; (18) Three seeds of Sumac (*Rhus sp.*)—trace; (19) Gravel (from gizzard only)—2% of gross contents; (20) Contents of the gizzard (except gravel). This finely ground mass consists, for the most part, of catkins and buds of the Hop-hornbeam, with a trace of Hazelnut catkins.

All that in one grouse.

GAME FROM CANADA

Planning on importing big game from Canada next hunting trip? Don't bank on it too much, because there are some federal restrictions in effect due to the outbreak of foot-and-mouth disease in Canada. No one can predict when the Secretary of Agriculture will lift the quarantine on moose, deer, elk, caribou, mountain goats, mountain sheep—even swine—and that includes fresh, chilled or frozen meats from these animals. But until he does:

(1.) Small quantities of *completely boned* and *thoroughly cooked* meat from these animals for personal consumption may be imported if inspected by a Bureau of Animal Industry inspector at the border port of entry. (2.) Animal byproducts (horns, antlers, hoofs, etc.)—from the listed animals may be imported without restriction *only* if inspection reveals they are clean, thoroughly dried and free from pieces of undried hide, flesh or sinew. Trophies consisting of clean antlers with a small amount of dried connecting bone should have no difficulty in meeting these requirements. (3.) Hides or skins may be imported if found to be hard-dried; otherwise, *only* if consigned to an establishment approved by the Bureau for disinfection or processing, provided the product is moved from the port of entry to the approved establishment properly sealed. But if properly treated by a taxidermist before importation—okay.

TROUT FLIES, 200 A.D.

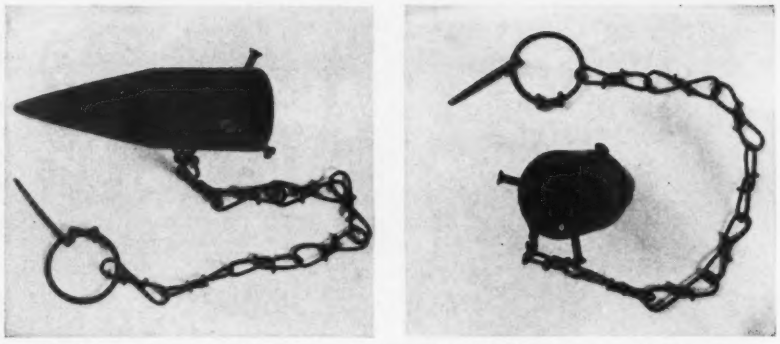
In a recent issue of Scope, a brochure published by the Upjohn Company (Kalamazoo, Mich.) mostly for the medical profession, there is an excellent and well illustrated article by Chris Schneider of West Nyack, N. Y., describing the trout flies, salmon flies and bass bugs (Dr. Henshall) that have been invented by doctors. A lot of them have, it seems. Furthermore, according to Mr. Schneider: "Fishing is a disease which the medical profession has never been able to treat satisfactorily. Far from working enthusiastically to stamp it out, doctors have on occasion encouraged its spread and acquired a certain fame among its addicts."

(That rings a bell with us. On the way in to town a couple of weeks ago we saw a certain well known Albany doctor—an old friend—out practicing his trade on the fly-fishing only stretch of the Kinderhook, and just for the hell of it we thought we would call his office. We were told his calls were being taken by one of his associates; the doctor was out on an emergency case. Ho hum.)

But the part of this article that interested us most was the following:

"The earliest known reference to flies appears in the *De Animalium Natura* of Claudius Aelian, about 200 A.D., in which he states: 'I have heard a Macedonian way of catching fish and it is this: Between Beroea and Thessalonica runs a river called the Astraeus and in it there are fish with speckled skins—what they are called you had better ask the Macedonians. These fish feed on a fly peculiar to the country, which hovers on the river. . . . These flies seek their food over the river, but do not escape the observation of the fish swimming below. When the fish observes a fly on the surface, it swims quietly up, afraid to stir the water above, lest it should scare away its prey. Then, coming up by its shadow, it opens its mouth and gulps down the fly like a wolf carrying off a sheep from the fold.

" 'Now, although the fishermen know of this, they do not use these flies at all for bait for the fish, for if a man's hand touch them they lose their natural color, their wings wither and they become unfit food for the fish. For this reason they have nothing to do with them, hating them for their bad character, but they have planned a snare for the fish, and get better of them by their fisherman's craft. They fasten red wool around a hook, and fix on to the wool two feathers which grow under a cock's wattles, and which in color are like wax'."



Illegal weasel trap seized by Protector Savard in Franklin County. Weasel pokes head in after bait at bottom of cone, but sharp screws set at angle prevent escape

POISON IVY, HAY FEVER

We've never seen any statistics on how many vacations are ruined by those two scourges dished out by Nature—poison ivy and hay fever—but there must be a lot of them. According to press reports, relief is on the way.

For hay fever there is a tongue-twister by the name of Phenergan hydrochloride; for poison ivy there is an equally unpronounceable drug labeled Pyribenzamine mixed with zirconium. Both are said to be extremely effective, but please don't take our word for it. Consult your doctor.

CAMPSITE CHARGE

When the service charge for the use of our 34 public campsites was announced, it was predicted by a few that the charge would drive people away from the campsites and into the wilderness where there was no means of regulating their activities, especially their fire-starting activities.

It doesn't seem to be working out that way. Over the weekend of the Fourth of July, campsite use was 25 per cent above that for the same weekend last year—192,733 man-days as compared with 154,403 man-days in 1951. And records to date indicate that this was not an extraordinary weekend; campsite use as of this date is far above what it was last year.

Reaction to the service charge would seem to indicate that we have a lot of citizens who don't mind paying when they get what they pay for, with some extras thrown in. A typical comment: "Why didn't you do it before?"

THEM WABBITS

With an abundance of rabbits in local covers this season, I am receiving a lot of complaints about the fuzztails playing havoc with gardens in the territory. And many and wonderous are the methods suggested to put a stop to this nibbling.

Tops in this line was the method suggested by Deputy County Commissioner of Welfare Phillip T. Schantz, who claims it tried and true. This system of throwing a scare into the bunnies consists of sinking beer bottles (emptying in the proper manner first, of course) in the garden, leaving about two inches of the necks protruding from the ground. Wind and air currents passing over these empty bottle necks produces a sound inaudible to human ears, but apparently bad news to the rabbits.

Since installing this system in his garden, Commissioner Schantz has not lost a plant to the invaders and strongly recommends the practice to other gardeners. He even extends an offer to aid in preparing the empties for use.

—Albert V. Roberts,
Game Protector

FIELD TRIALS

"Big circuit" field trial activities reach a high point in New York this year. Three national championships and a regional championship are being run on Department field trial grounds. Our field trial people say it's a rare honor for a single State to have so many top flight events. It is the result of the Department's co-operation with field trialers to promote the use of bird dogs and to add to the multiple use of State areas.

The events are: The Pheasant Futurity on Oct. 10 and 11, the National Pheasant Championship on Oct. 13-15, the Atlantic States Amateur Regional Championship, Nov. 7 and 8—all on the Three Rivers Game Management Area at Baldwinsville. And the Grand National Grouse Championship opens on Oct. 31 at the Pharsalia Game Management Area. In addition to these national and regional events, the New York State Bird Dog Association Winner or Winners Stake is being held at the Baldwinsville Area on Oct. 4 and 5.

HUNTING PROSPECTS, FALL 1952

As Reported by District Game Managers

DEER

Hunting prospects look better than in many years. A record number of counties (29) is being opened to a two-day deer of either sex season, at the end of the regular buck season, in that portion of the State below the Mohawk River. And for the first time, the two-week archery season before the regular gunning season in the State is being opened to the taking of deer of either sex instead of bucks only.

Especially good hunting should be available in most of the Central and Southern Tier counties and in the peripheral areas around the higher mountains in the Catskills. In the extreme northern part of the State the condition of the herd is generally good in terms of abundance; in particular, excellent hunting should be available in northern St. Lawrence County. In the Adirondacks, populations generally are high, but local exceptions have been noted.

BEAR

No particular change can be expected this year in bear hunting. In the Catskill area they exist in the wilder portions but have not been abundant in recent years. The principal bear hunting will be found as usual in certain Adirondack counties; past records indicate that Essex, Hamilton and St. Lawrence counties lead.

GROUSE

In the wooded and brush areas of the State removed from sections of intensive farming, ruffed grouse continue to hold the high population level which has been the case for the last year or two. Throughout the Southern Tier and the Catskill section the population is as high as or slightly higher than in 1951. Excellent hunting can be expected again in the central and eastern part of the State. In the north central and St. Lawrence sections the population may be slightly lower, but hunting chances should be good. In the Lower Hudson district, hunting can be expected to be about the same as last year, and farther up the Hudson the birds appear to be more plentiful than last year. However, in the Champlain Valley and northern section of the Adirondacks the birds are somewhat off in numbers, although hunting should still be good.

PHEASANT

In the principal pheasant range in the Lake Ontario plain section and along the Mohawk-Hudson valleys, the birds seem definitely to have increased this year. In the western portion of the range there are indications of the highest pheasant population since 1947. In the easterly section of the range, the birds are somewhat more abundant, and hunting should be fair again this year. Elsewhere in the State (where the pheasant range is of a spotty nature) hunting prospects look good. In the south central part of the State, birds are in fair numbers—even well up into the hills where they were not reported three or four years ago. The same applies farther west in the Southern Tier. In the Catskill section it is expected that hunting should be better than in years in the better covers (to be found in the Greene, Schoharie and Otsego counties lowlands). In the Adirondack section good but obviously limited shooting should be found in the better farming territory.

SHADES OF THE D&H!

Coming down the Hudson near North Creek. Notice market logs in River.

COTTONTAIL

Again cottontail hunting should be excellent throughout the State, with the exception of areas of high topography in the Adirondack and Catskill mountains and sections of the Tug Hill country. In most portions of the State rabbits are extremely abundant and appear to be approaching a peak in abundance. The good hunting which prevailed during 1951 should be bettered this fall and winter.

GRAY SQUIRREL

Squirrel hunting should be good in the Ontario-Lake Plains section, since they seem to be approaching a peak in abundance there. A similar situation prevails in the lower Hudson Valley. Elsewhere in the State the population is either increasing slightly or is about the same as last year. In the Southern Tier the population has been spotty. In the Catskill section high populations occur locally, but the same spotty pattern exists. In the northern portion of the State hunting should be fair to good in the limited good range.

VARYING HARE

In the Adirondacks and Catskills, fair to good populations prevail. Sections of the Catskill area that have not been excessively hunted will supply fair hunting. In the northwestern part of the State some covers will afford excellent shooting while others will be less good than last winter. In the central and eastern portion of the Adirondacks high populations prevail, and there are good hunting prospects throughout this section.

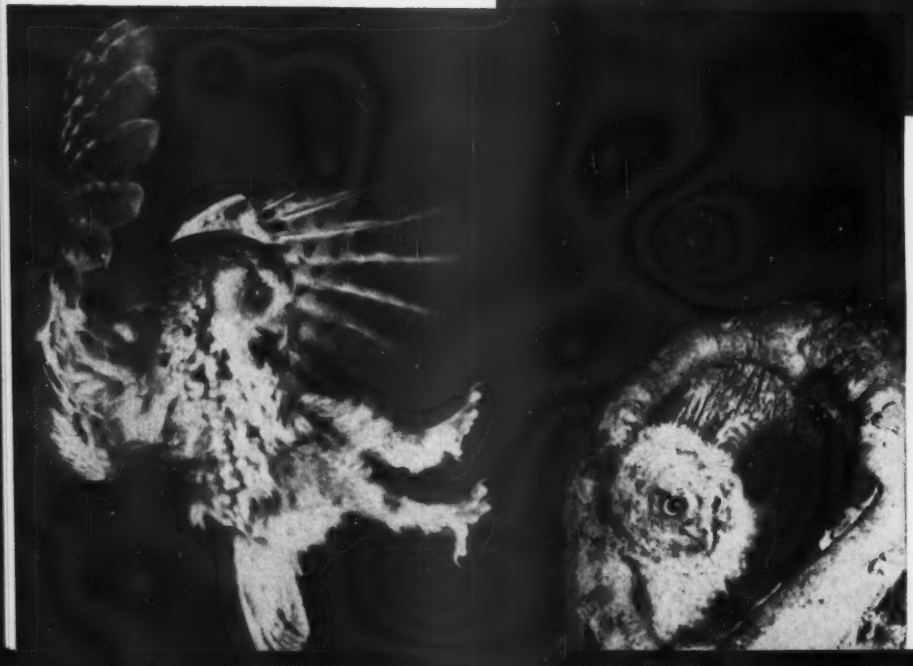
WOODCOCK

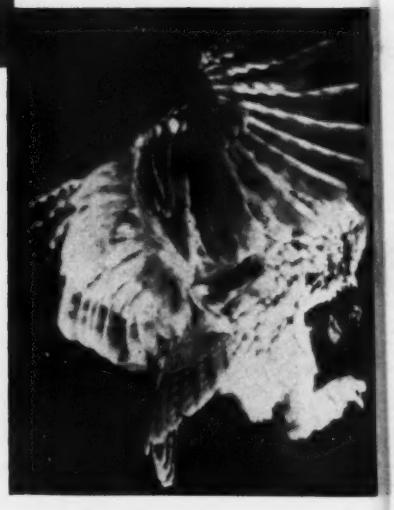
In the State as a whole indications are that native populations will be slightly better this year than last. If flights of birds from the north provide good additional hunting, this fall promises good sport for woodcock hunters—especially in the northern part of the State.

WATER FOWL

Virtually throughout the State local breeding conditions have been reported to be better this year than for the last few years. But except for early season hunting, local populations will not determine the waterfowl hunting success achieved by hunters in the State. Much will depend on weather and migrations from the north during the season offered by the Federal Government; more will depend upon the length and dates of the season itself.

SCREECH OWLS





These pictures were taken May 20 in an orchard on the Guy Davis farm a few miles from Trumansburg, Tompkins County. All were of the speed flash type—taken at 1/5000ths of a second. The owls were most active from 8 to 9 p.m., after which there seemed to be a short rest period before they resumed activities. As shown, June bugs made up most of the fare, but on later visits I found the remains of mice.

Only about ten inches in length, the screech owl is the second smallest owl found in New York (the saw-whet owl is the smallest). He is a native resident the year 'round and on wings with a two-foot spread he glides out on nocturnal hunts that yield untold numbers of small rodents and insects. Screech owls are therefore protected.

The nesting place shown here is typical—a hole in an apple tree. Usually they lay four or five white eggs by the end of April, which hatch in from 21 to 25 days. Screech owls are often dichromatic, which means there are two color phases, in this case gray and red. Both phases may be found in the same brood of young owls, and the adults shown here are dichromatic—one gray, one red. —David G. Allen

LETTERS TO THE EDITOR

ON CAMPING

Gentlemen: In last issue of *The Conservationist* under "Current Problems" on Page 10 you mention camping in the Forest Preserve. Up to now I had thought that this was forbidden. Could you please spare the time to give me more information about such camping, such as where can one do this, and what are the rules and regulations which one has to observe.

As one who has really enjoyed the campsites, I am only too happy to pay for the privilege of using them.

John B. Wheatley, Yonkers

• *Under ordinary conditions, except at the public campsites and on the islands in Lake George, camping is free anywhere in the Forest Preserve for three nights without a permit. This includes the lean-tos erected by the Department. For camping in the same location longer than three nights, a permit must be secured from the local Forest Ranger or from Forest District Headquarters located at Lake George, Saranac Lake, Northville, Herkimer or Canton; and in the Catskill area, at Catskill and Middletown. These permits are free. For complete rules and regulations governing use of the Forest Preserve, send for Recreation Circular 2, Conservation Dept., Arcade Building, Albany, N. Y.—Editor*

Dear Editor: It seems to me that the campsite charge of 50¢ per day is excessive. Since the cost of campsites, trails, etc. is largely paid for by licenses, it seems fair that when at least one person in the camping party can show a license for the current year (such as fishing, hunting and fishing, etc.) then no charge should be made. If there is no license, then the charge should be 50¢ for issuing the permit and 50¢ for each renewal.

Jesse Dildine, Geneva

• *Wait a minute. Have a look at the back of your license. It says there that the money you paid for it can be used only for fish and game work—not for campsites, trails, etc.—Editor*

Dear Sir: In your recent issue there is an article on campsite service charges. This seems only fair.

But there is one thing which concerns me: In my family there are seven of us who camp, and the article says that only six are allowed to camp on one permit. If I must take two spaces it will be much harder for me to find space in the crowded sites. Also, I was planning a trip with a group of Scouts—which will probably mean nine or ten of us. And sometimes my children like to take along a friend. What must I do if I plan to camp in the mountains this summer?

Mulford Fenton, Whitney Point

• *We sympathize with your problems, but are sure you will understand that we have to draw the line somewhere. Children two years of age or younger will not be counted, and for six persons above that age, the charge of 50 cents amounts to only 8⅓ cents per night per person. We don't feel that we can make any exceptions, or charge less.—Editor*

Dear Sir: In 1902 I began work for the General Electric Company in Schenectady and for 35 years with my family and friends I enjoyed the woods and waters of our beloved Adirondacks, camping, hunting and fishing in its forests and streams. In my opinion the small charge at public campsites is entirely justified, just for the protection it gives one's family against the dangers and disasters that can come to unprotected people in the wooded areas Camping out with one's family can be a beautiful experience—or it can be a nightmare of regrets. In a regulated public state camp one is quite free from most all the worries that go with the welfare of small fry turned loose in a jungle.

I always enjoy a visit to a state campsite, where I see so many happy folks enjoying themselves in such a safe manner.

Paul Floyd Cornish, Altamont

NOTES ON BROWN TROUT

Dear Editor: Fishing in the Kayaderosseras and the Battenkill, I have noticed that many of the brown trout I catch have different markings from those caught in wilder sections—the spots are fainter and more on the yellow side, compared with the rather large red spots on brownies taken from less fished streams. Does this indicate a different species, or does hatchery background have something to do with this?

I am also curious as to what your estimate might be of how long any substantial number of trout might remain in a stream like the Kayaderosseras if stocking operations were discontinued. In other words, what percentage of the stream's trout population could be expected to be maintained by natural reproduction?

John Moran, Schenectady

• *In general, it is our opinion that for varying periods after stocking it is usually possible to differentiate hatchery from wild fish. Color of the hatchery fish usually becomes brighter under wild conditions, the rate of change depending upon adequacy of the food supply and other conditions. We are of the opinion that differences may remain throughout the life-span, but that they are recognizable to only a limited extent after complete acclimatization of the hatchery fish. There is evidence that hatchery selection as compared with natural selection may furnish a genetic basis for color differences, but these do not approach the magnitude of specific differences so far as known.*

We have no doubt that the Kayaderosseras and similar streams would maintain fairly heavy populations of trout indefinitely without stocking. The Kayaderosseras and other streams differ not only from each other but from section to section of the same stream. A rough guess would be that in the section above Rock City Falls the Kayaderosseras, might yield about half as many trout without stocking as it does with stocking.—C. W. Greene

WHAT A RACK!

Dear Sir: These pictures are of a great buck which was taken by Clarence Wade of Willsboro, Essex County, on the afternoon of the last day of the deer season, 1951. He got him on Willsboro Mountain about four miles from the town. The head was presented to me and I had it mounted.

The pictures do not show the head off well. It is really beautiful—the longest horns I have ever seen in a white tail deer: Right 29¼ inches, Left 28⅜ inches. Spread 25 inches. By the Grancel Fitz method (which by the way Grancel told me recently is out of date), it scores 192 points.

Lewis P. Evans, Elizabethtown

• *In the second issue of one magazine (six years ago) we published photographs and statistics of the ten best deer heads taken in the State. Since then there have been many changes, and we will try to come up with a revised edition in our next issue. Meanwhile, if you've got any new entries (no matter when the buck was killed), please send us the information—and photos if possible.—Editor*

FOREST PRESERVE

Dear Editor: There are two main groups of thought: Either leave the Forest Preserve alone and let nature take its course, or open the forests to enlightened forest management. Both plans have their merits, as manifest by the fact that so many respected and informed citizens support opposite views. Yet I fear that to reduce the potential answers to one concrete proposal or plan of action, you, the Conservation Department, must first give your readers a general idea, at least, of what would be done with any new authority. In this debate, then, the Conservation Department (being the group most familiar with the factors involved) could do its greatest service by explaining just what it believes should be done, not at the policy level but in actual practice.

As an example, Mr. Schaefer (February-March, p. 3) informs us that "96% of the entire area of both parks" was "pillaged and ravished" before the State obtained ownership. The inference is that the same thing will happen again once the lumbermen are permitted to enter the reserve. Now, if the Conservation Department were to explain in *The Conservationist* that a large proportion of the forest would remain intact, that the steep slopes and water courses would not be disturbed, that certain areas would be set aside as "museum pieces" and that sound silviculture and forest management would regulate cutting practices throughout the forests, then the Department would render an admirable service to the citizenry. But until the people know more exactly what would be done to their wilderness, until they are given the broad outlines of some sort of management plan, I believe they will not let anyone harm their forests. And rightly so.

Edwin H. Ketledge, Dept. of Biological Sciences, Stanford University, Cal.

• *At the outset of the discussion, we presented our views as to why conservation principles and practices should be applied to the Forest Preserve. And in our last issue, we published an article on zoning which suggested some possibilities as to how this might be done.*

But as you know, the question of the Forest Preserve is now being considered by a Special Advisory Committee named by Assemblyman Wheeler Milmoe, Chairman of the Joint Legislative Committee on Natural Resources. This being the case, we feel that the present role of the Department should be merely to co-operate with the Committee by supplying information as requested.—Editor

THE TEETH OF PIKE

Gentlemen: Do great northern pike shed their teeth, and if so when?

Al McDonald, Poughkeepsie,

• *Yes, and they may do it any time of year. But they don't lose them all at once; they have plenty of teeth in service at all times.—Editor*

THAT HIGH-CHEWING BEAVER

Dear Editor: Read about that high-chewing beaver in your last two issues. I can show you a soft maple chewed over four feet above ground here up Dead Creek. He started at the usual height, 1½ feet, but as saplings are pretty tough near the ground he went farther up. As it was cut before snow came, for winter food, there is only one explanation—they climb up and do the cutting. Sapling about four inches thick. I think we underestimate their climbing ability. A long life to *The Conservationist*.

Carl Mischke, Conifer

Gentlemen: While a beaver of the larger variety will reach to considerable height to do some of his cutting (even while working in water), it appears obvious that there must have been some snow remaining on the ground at the time the pictured cutting took place, probably late in the spring of '42 (March) so that the cutting would have presented a reasonably "new" appearance even as late as October of that year. And the fact that the tree was felled prior to leafing time would not prevent the poplar from producing a good crop of leaves, since there seem to be a few small connecting wood tissues between the butt and tree proper. I have observed similar poplars locally, felled in November and December 1951, which bore considerable foliage in 1952.

If the spot in question was subject to spring flood-water of a couple feet depth it would have provided ample altitude for the beaver to have done the job, but it seems more likely that a long enduring and crusted spring snow-drift was the guilty elevating element.

H. S. Bradley, Hamilton

Dear Editor: Regarding the poplar tree that was felled by a beaver (the picture was in the April-May issue of *The Conservationist*):

Here is what happened—the tree was felled when the snow was deep. The tree was not cut entirely off the stump, leaving a small portion of wood that supplied sap from the roots. This small amount of sap furnished enough moisture to grow leaves. Later this feeder dried out, as it was no longer protected by the bark, and the leaves died. I have seen this condition several times, especially where the beaver fall black ash and yellow birch.

Grover Lynch, Newcomb

• *Grover was one of our best Rangers for more than 30 years.—Editor*

GUNS IN THE FOREST PRESERVE

Dear Editor: As an attentive observer of wildlife I have come to the conclusion that the only way in which we can save our big birds and many of the smaller ones from destruction, is to prohibit the taking of shotguns and rifles, and particularly .22 caliber rifles, into the Forest Preserve except during the hunting season.

I have camped on Round Lake (Middle Saranac) and Weller Pond for over twenty years, my camping season averaging about five months. Up until a few years ago, I saw many eagles each summer, as well as hawks and gulls. Loons nested on the pond, and there were many red-winged blackbirds, kingbirds and herons on the river.

Last summer I saw only one eagle; while gulls, hawks, blackbirds, herons and even kingbirds have become scarce. I did not see any loons until late in the fall when a pair stopped in the bay near our camp.

One afternoon, when we knew that the loons were there, a couple of men ran into the bay in a motorboat. They fired two shots and the boat never stopped but circled the bay and ran back out. We never saw the loons again. Many persons carry small rifles in their boats and canoes for target practice; the targets being any kind of bird and small animal. These spring and summer hunters are usually boys in their teens, but many men do the same thing.

It is useless to appeal to the honor of these "sportsmen." We must take their guns away from them.

M. Rebentisch, Saranac Lake

BRUTAL CONTRAPTION

Dear Editor: Herewith I enclose a snapshot I took of what I believe was used for a deer and bear trap. It sure is a brutal contraption, all home made, the springs being double sections of a cross cut saw, while the five double-edge knives were hand made.

It was found by Marshall Blanchard of this town. He is a buyer of scrap iron and he found it while sorting over a pile, but could not tell just what load it came in.

I assume it was set as I have it in the picture —by driving the spike at the base into a stump or logs and building a "cubby" around it. The stick at the top was evidently dislodged by the victim. (Lower trap is only a shadow.)

Lewis P. Evans, Elizabethtown

PILEATED

Dear Editor: We have a new neighbor at our camp on Panther Lake in Oswego County. It is a large pileated woodpecker and though he is very shy we often catch glimpses of him flying through the woods back of the camp.

He has raised havoc with some of the hemlock trees, boring as many as a dozen oval holes in a single tree, through the green or live wood to the very heart of the tree. Some of the holes are a foot long and the chips from three to five inches long. One can hardly believe such work could be done without steel equipment.

My neighbors have declared war on this woodpecker. Isn't he protected by law? I hope so, for I feel any bird who works that hard to get a meal deserves to live.

Mrs. Robert J. Russell, Syracuse

• *He's protected, and the meal he works so hard to get consists of the insects that are killing the hemlocks. So please tell your neighbors to call off their war.—Editor.*

GOOD SCOUT (GIRL)

Dear Mr. Miller: Your letter came yesterday and the material (bulletins and magazine reprints) came today. Thank you very much. I've been looking it over and it will help me a great deal.

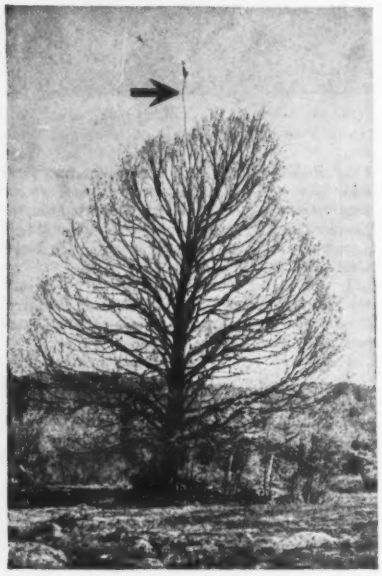
Last summer I earned my wild flower and tree badges while I was staying here at my Grandmother's summer home (Brant Lake). This summer I hope to complete the mammal, bird, reptile and amphibian, and rock badges. My Dad is the head of all the science and nature work at Forest Lake Camp near Warrensburg. He can't help me very much because I see him only on week-ends. So you can see how much I appreciate your help. I am taking my First Class major in the field of nature. This spring my Dad gave our Troop the star and weather badges. You see we have a 6" telescope in our back yard (Franklin Square, L. I.) My Dad ground the lens and built the telescope. He is a member of the Long Island Amateur Astronomers. I like nature very much and would like to subscribe to the *New York State Conservationist*. Please find $1 enclosed.

Next year I am planning to do the conservation, insect and rambler badges. Thanks again for helping me.

Louise A. Scholl

P. S. I'm not afraid of snakes.

• *Glad to be of any help to a Girl Scout.. We included the reprint on snakes only to reassure you and your friends that snakes aren't as bad as they're made out to be.—R. B. M.*



SPRAY MARKERS

Dear Editor: I enclose herewith a photograph which I took a couple of weeks ago on Route 9, between Warrensburg and Chestertown. You will notice what appears to be a bag tied on a pole and secured at the top of the tree.

What goes on?

George L. Shipley, New York City

• *Mr. Shipley has observed one of our aircraft treetop markers. These markers, which are grain bags filled with leaves and brush fastened to the end of a pole, indicate the outbounds of areas to be sprayed by our airplanes for control of the gypsy moth. These artificial landmarks act as guides for the pilot in flying so that the insecticide is released only over the area where the application is desired.—C. J. Yops.*

ENGLISH WOOD PIGEON

Dear Editor: The purpose of my letter is to suggest a game bird that as far as I know has never been introduced into this country, and it is the English wood pigeon.

I happen to have a mounted specimen of this bird, and it would be a wonderful addition to our game, being larger than our tame pigeon and also migratory—so that the proper way to introduce it would really be for not only N. Y. but adjoining states to purchase several hundred to liberate.

At various times in past years I have tried to get articles on the subject published in various sporting papers, but with little success. Some wrote me that it might be a risky business, as they might become a pest like the starling or English sparrow. That is absurd, for I can't imagine any edible game bird ever getting too plentiful, what with our millions of shooters. But if that ever took place, have an open season the year around, and the supply would be wiped out in no time.

At the present time I don't know what prices these birds bring in the English markets, but before the last war one could buy them for from 30c to 40c each so at those prices the outlay for stocking would be light, though live trapped birds might cost more.

George D. Canfield, Peekskill

SHADE TREES

Dear Sirs: We have in front of our house two elm trees, which, due to the depredations of the elm beetles, will not last much longer, although sprayed by the city each year. I should like to know what kind of tree I can plant in our front yard which will grow in the shade of the elm trees and thus, when the elm trees are gone, we will still have shade. The tree planted would not be entirely in the shade, but there would be some. Since the object is to shade our house in summer, it would have to be a tall tree when grown with plenty of foliage. I hope there is such a tree and that you can give me this information.

We have been subscribers to your magazine for some time and enjoy it very much although we are not hunters and fish about twice a year. We feel you are doing a very real service to the State.

Mrs. Paul Murphy, Rochester

• *Unless you have some very special soil condition, I would think that Norway maple would be the most suitable tree to plant for your purpose. This species is quite shade enduring and makes a very good shade tree when mature.—E. W. Littlefield.*

SENSE OF SMELL IN FISH?

Gentlemen: Would you be able to tell me whether or not fish have a sense of smell? (I mean freshwater fish).

Edward T. Cornell, Westerlo

• *Fish have an olfactory passage, not connected with the mouth, which functions in this capacity. Also, they have taste organs in the vicinity of the mouth.—Editor*

TESTING WATER

Dear Sir: I have recently purchased a farm in Stephentown Centre, N. Y. It has a spring in the cellar which can be used for water supply. I wish to have this water tested.

Will you let me know whom to write to and what I have to do in having the test made.

Charles Diehm, Mineola

• *Write to the Department of Health, Albany. —Editor*

FANGS

Dear Editor: The enclosed is the fang (or so I believe) of a copperhead, killed this morning. My pal insists that it was just a water snake. The markings on the back were not plain, as the snake apparently did not have long to go before its next shedding. I never heard of a water snake with fangs. Would you please settle our argument?

F. M. Crane, Bedford

• *Fangs are hollow (like a hypodermic needle) and hinged at the jawbone for folding. What you enclosed appears to be part of the jaw of a water snake; certainly not a fang.—Editor*

BB GUNS

Dear Editor: I'm writing this letter to ask for information on the air rifle (B.B. gun) in New York State. Would you please let me know the following: (1) Age limit for carrying and shooting of B.B. gun. (2) Where may you shoot the gun? (3) Care of air rifle. (4) If permit is necessary.

Michael Roscoe, Green Island

• *Neither the Conservation Law nor The Penal Law makes any distinction between the air rifle and other types; regulations on use of the 30-30 apply equally to the BB gun. The reason is that both are dangerous weapons. Of the two, the BB gun is probably the more dangerous because fewer people appreciate the damage it can do.—Editor*

CITY FISHING

Dear Sir: I am writing this letter to express my everlasting gratitude for the wonderful thing you have done at Oakland Lake in Queens, New York City. By stocking this lake with trout and opening it to the public, you have succeeded in bringing the city angler's dream right to his very doorstep.

I visited this lake on April 12, opening day, but was not equipped to go fishing as I had to work that day. But we went back the next day —my 12-year old son and myself—and though the day was cold and dreary we never experienced so much pleasure. Not so much for the fish we caught (my son a tagged trout, and myself a 12½-incher) as the feeling of peace and contentment which permeated us; a sense of getting back to nature after a long winter of hibernation. The everyday cares and worries literally were washed away. And the wonder of it all was that it was so close to home.

One more thing before I close this letter. I should like to express my commendation to the Wardens and attendants who supervised here. They were courteous and went about their duties in a most efficient and considerate manner. Consideration for the angler was the keynote to all their actions. No unpleasant incident occurred during all the time I was there. They offered many helpful suggestions to the many people who came to the lake for the first time.

Harry Rappaport, Brooklyn

WATER DISTRICTS

Dear Editor: I live in an area (a summer home) in the Adirondacks which has three nice lakes all contiguous to one another. There has been some talk recently of getting this area organized as a water district. Would you be kind enough to give me the address of the office to which I could write to find out all the necessary procedure we must follow to do this, etc.

George McGay, Bellerose, L. I.

• *The procedure to be followed in the establishment of water districts is outlined in the town law under the provisions of Article XII. Most attorneys could readily advise you in regard to matters contained in that law. Or you might contact the Town Clerk of the township within which your summer home is located for further information.—J. C. Thompson, Executive Engineer, Water Power and Control Commission.*

NORTHERN CATSKILLS

Dear Sir: I have just finished reading the article "Land of the Northern Catskills", by Arthur C. Mack and I want to compliment him on a fine job. Enclosed please find a snap taken on top of Mt. Pisgah only two weeks ago. The well is still filled with water despite the dry season we have had, but I would advise against drinking the water as it no longer flows steady.

Counted 15 deer on my trip from N. Settlement road to the top of Pisgah—which proves we have a fine feeding place for these animals.

Splendid articles; glad I subscribed for the next five years.

Larry Ross, Windham

Dear Mr. Mack: It gave me great pleasure to read your article on "Land of the Northern Catskills." It brings back to me happy days spent there when I was a boy (before the observatory on Mt. Pisgah was built). With my parents, brothers and sisters we stopped at a boarding house run by the Crandalls, half way up the hill from Durham to Pisgah. While there I got great experience in farming, never for pay, hunting, etc. which has been a source of great pleasure to me ever since. I remember well the "tavern", "cider mill", etc.

Frank L. Zerega, Brooklyn

PROBLEM IN SPORTS ETHICS

Dear Sir: A problem in sports ethics:—I have been, either directly or indirectly, the recipient of numerous tales of fishermen who have gone out and caught anywhere from 100 to 300 fish of the panfish variety. If these people (it's not in me to call them sportsmen) eat that many fish, they are certainly gluttons; if they don't eat them, what do they do with that many fish? Knowing the difficulty in giving even a few fish away, I can't help but believe that most of those fish go in the garbage. I know that there are lots of fish in the streams, so maybe I'm being a fuddy-duddy, but that will never be my idea of sportsmanship if I live to be a hundred. How about this?

William Van de Mark, Rochester

• *A problem in sports ethics, but also a problem in Conservation. In some waters, reducing populations of coarse fish improves conditions for more desirable species. But in general, and particularly with regard to edible species, the old proverb applies: Waste Not, Want Not.—Editor*

MEASURING FISH

Gentlemen: From time to time we hear reports of persons being arrested on the charge of possessing under-size game fish, on the basis that the length of a fish is not to be considered from the end of the nose to the end of the tail, but rather to the end of the body, to the V in the tail, etc. Nowhere in the condensed syllabus given with the license in past years have I been able to find any reference as to how a fish shall be legally measured.

Our members are taking an active interest in the subject of conservation, eleven additional ones having just subscribed to *The Conservationist* as a result of our Committee on Agriculture and Conservation having presented the information to them about the magazine, and I am sure that an answer to my question will be appreciated by them.

Sterling B. Pugh, Secretary,
Kiwanis Club of New Rochelle, N. Y.

• *All fish (except striped bass) for which a minimum size limit is provided should be measured from the snout to the tip of the tail. Striped bass should be measured from the snout to the fork of the tail.—Editor*

LOTS OF LYNX

Gentlemen: I have a couple more lynx for you, one of which may be a decendant of the one killed in Clintonville in 1927 (page 34, June-July '52).

Three of us characters were driving along the Trout Pond road above Clintonville one summer day in 1947. We had been eradicating ribes (currants and gooseberries, for blister rust control.—Ed.) for the Conservation Department and were on the way home. Slowing down for some bumps we spotted a tawny brown panther-like creature trotting ahead on the dirt road. It ignored us as we cruised slowly behind it. The legs were thick and short and the body long and powerful. Tom Craig, the foreman, exclaimed: "Doesn't look like the wildcat my brother Johnny shot a while back." Jim Lozo and I agreed that it didn't look like the mounted wildcats we had seen. Must be a lynx, we agreed.

And in Ausable Forks there is a mounted lynx killed in that vicinity after it had attacked a local resident and done considerable damage to him. This happened in the summer of 1941 (I think), and I believe Wolfe, the Game Warden, possesses the story on this.

Orlando Gezzi, Newcomb

• *What's the story, Protector?—Editor.*

ONE MAN'S MEAT . . .

Dear Editor: As a matter of curiosity, I wonder if it would be possible for you to send me the remaining issues that George Bird has had discontinued, as he seemed to be discontented with the last two issues (Letters, p. 37, June-July). I am an assistant Scoutmaster of Troop 50 in Troy and the younger boys in the Troop (13–14 years old) would enjoy it very much. In the past we have gotten *The Conservationist*, but one of the members brought it in to us.

I personally believe that this magazine is by far the greatest book issued for boys and men that want to learn about conservation (if they want to learn).

Ken Pascoe, Troy

• *Afraid we couldn't do this without Mr. Bird's permission.—Editor*

NATIVE DUCKS

Dear Sir: I have lived on Long Island quite a number of years and have observed bird life on the Island for the past 20 years. You may add to your list of native nesters besides the ones Mr. Davenport mentioned (Letters, Dec.-Jan.), the Ruddy Duck and the Greater Scaup, of which I have seen the nests and the young here on Long Island. As to nesters in the western part of the State, you can add the Green-winged Teal and the Blue-winged Teal.

Mr. Davenport states that according to Mr. Pough and Mr. Cruickshank, the Blue-winged Teal, is a rare boarder in New York State. I wish to correct him in that statement and quote from Mr. Cruikshank's book, "Birds Around New York City". The bird has been found breeding in Troy Meadows, South Plainfield in New Jersey, and Orient, Speonk and East Moriches on Long Island. Young have been observed in other localities; adults have frequently been seen in the summer and it is quite possible that the species nests much more regularly than the few definite breeding records might indicate.

Thomas W. Stetson, Jr., Uniondale

CORRECTION

Gentlemen: Never a word of praise for your excellent magazine until somebody discovers something wrong, but suppose that is the usual editor's life. Please refer to your April-May *Conservationist*, page 25, article on Clinton County, stating two fire towers in county both accessible by trail. Palmer Hill (not Plummer Hill), altitude 1053 feet, is accessible by your own auto, and Bill Nolan, Fire Ranger, maintains a little picnic ground for your enjoyment while you gaze on one of the best views of the complete Adirondack range to the South.

Neil P. Benway, Glens Falls

CREDITS

Second cover, pages 12, 13, 24, 31, 32, Earl McGuirk; 3, George C. McCullough; 5, 8, 20, 21, 25, Fred Everett; 6, 7, P. W. Fosburgh; 10, 11, 34, 35, David G. Allen; 13, Richard Fischer; 14, 15, 16, 17, Elmer M. Mitchell, N. Y. S. Museum; 26, Arthur J. Tefft; fourth cover, Louis C. C. Krieger.

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Problem Children

IN its June 9, 1952 issue, *Life* magazine ran another of those sure-fire picture stories about animal persecution. This one, called "Dawn's Fawn", had extra sentimental appeal because a spotted, big-eyed fawn and a little girl were the principals who apparently were getting a dirty deal from what anybody would infer was a bunch of stupid stuffed shirts.

Under a fine full-page picture of an attractive child cuddling what the public universally now calls Bambi, an appealing little spotted tyke about as dangerous as a fan-tailed gold fish, *Life*'s title lines said: "Jersey girl runs afoul of law for harboring 'dangerous' deer."

The story went on to explain that Dawn's father had found a "helpless six-day-old fawn in the road" and that hardly before Dawn could get the first eye dropper of milk into her new pet, her troubles began with a law which prevented such happy girl-fawn relationships. Finally, after her father appealed to the Governor, New Jersey game officials said Dawn could keep the deer for two months but then (after probably tearful separation) the fawn would be taken away and put in a refuge. Tame, growing deer "sometimes gash children's faces with their hooves," *Life* said by way of giving Jersey's official explanation of its apparent hard-heartedness.

Life undoubtedly left the impression with millions of folks that Dawn's father was a hero for "saving" the fawn. Maybe he just didn't know any better, but *Life* should have, and *Life* deserves a good swift kick in the editorial pants because the story unquestionably did substantial harm to the future welfare of countless other little fawns —which, *Life*'s readers must assume, make such fine pets.

Conservation agencies of all the states constantly are urging folks not to pick up and take home baby wild animals, especially fawns. But people still insist on doing it, excusing their action by a wrong assumption that the little fellows have been deserted, simply because Mother isn't in sight. Fawns *do* make appealing pets. But, those which survive insist on growing up. Then they're normally condemned to a life of confinement simply because they've lost their fear of man. Given freedom, the trusting creatures virtually always become easy victims of dogs, automobiles and the kind of trigger-happy goons who go around shooting at signs.

Hand-reared buck deer, like Dawn's, and all bear cubs, can never be liberated safely *at all*. It's different in the wild. There instinct tells them to run from—rather than to—all humans.

In New York we do not have on record (as far as we know) any case of attack on humans by wild, uninjured bear or deer. But unprovoked attacks, many of them fatal, by so-called tame deer and bears are numerous. We vividly recall the bloody remains of a little girl at Otisville (Orange County) killed by a yearling bear, picked up when a cub in nearby woods by her father and brought home to her for a pet. We can still see the savage thrust of "Mickey", a buck once bottle-fed by another little girl. This deer, sent to New York's DeBar Mountain Game Refuge, paused long enough while eating carrots from the caretaker's hand to impale the 250-pound man and rip and toss him like a sack of spilling grain.

Take Whitey, one of a herd of many hand-reared deer now safely penned at the State Delmar Game Farm. Whitey once was brought up by another little girl whose father found it by the roadside. Last fall, the time when the necks of all bucks swell with the advent of the breeding (and fighting) season, Whitey burst through his pen wire and typically without warning attacked the Game Farm Foreman whose cries brought help just in time.

A few days later a young woman thoughtlessly climbed over a high fence into another nearby pen that held a bottle-reared buck. She wanted to take a picture. She went to the hospital instead. The man who feeds the Delmar herd of captive deer (all, except the animals born there, taken from people who thought fawns make nice pets) is exceedingly careful to keep away from the tame bucks in the Fall. He has been gored three times. The names of persons killed or seriously hurt by so-called tame white-tailed deer would fill a good part of this issue.

The same with black bear. Once reared by Man, they lose fear of him. Never can they be trusted, so never can they be liberated for safety's sake. Liberation experiments in this State have been bitter; sooner or later the animals had to be tracked down and killed

You've seen lions and tigers in trained animal acts. Did you ever see an American black bear?

For a time this year, the Conservation Department alone was feeding 30 quarts of milk and many pounds of prepared food a day to ten bear cubs and yearlings mostly confiscated from people who thought they were cute.

The Department has had as many as 100 fawns in a single season. Game Protectors groan at the thought of lengthy bottle-feeding chores. State Game Farms simply can't handle any more. Public zoos are full up. If the public should hear of the deliberate killing of a single fawn or a single cub, the hue and cry would overshadow politics, flying saucers or the war.

Once in a while, the adoption of a fawn or a cub is a legitimate act of mercy. In such cases the doe may have been killed, usually by dogs. Mother bears, aroused and unwittingly chased from their lairs when their cubs are very young and still unable to walk often desert the youngsters without hesitation. We took over two such definitely deserted cubs this year. But the others were all kidnapped. That's right, kidnapped.

Or take the case of Freddie, the Fawn.

Freddie was struck by a car last spring near Oneonta. His broken leg was set by a veterinarian whose humane action was given wide newspaper publicity. Yet since the deer, even if it recovered satisfactorily, would be a captive all its life, the Conservation Department felt it much better all around to ask the veterinarian to kill it painlessly as soon as possible. Of course, the public reacted. The Department was condemned editorially as heartless. Yet long experience has shown that until Freddie's leg healed he would be dependent on Mankind long enough for him to lose his fear. Under the circumstances, his destruction was the only humane way out. It is virtually impossible to find safe public homes for deer where human safety is a factor too.

SO there's a very sound and very humane reason for State laws and policies which forbid public possession of such illegally taken wild animals as these. But laws or no laws, we wonder whether Dawn's father or *Life*'s writers would like to be responsible for the welfare of Dawn's fawn when it grows up. We wonder whether they'd care to feed and water it when its neck swells, its eyes dilate and its sharp-tined antlers glisten in the autumn sun. You can hold off a cobra but not a rutting buck that's lost its fear of Man. We've tried.

—CLAYT SEAGEARS

PROBLEM CHILD —"ORPHAN" WHITE-TAIL FAWN

FLY MUSHROOM
Amanita [illegible]
POISON

Courtesy of N.Y.S. Museum

POISON
DEATH-ANGEL
Amanita phalloides